

L24 ANSWER 5 OF 2146 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:776631 CAPLUS

DN 130:29071

TI Citric and **electrolyte** compositions for prevention/retardation  
of hair growth

IN Kahale, Laura; Nearn, Malcolm

PA Kahale, Nadim, Australia

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-06

ICS A61K007-155

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9852515	A1	19981126	WO 1998-AU374	19980520
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9875123	A1	19981211	AU 1998-75123	19980520
	AU 727819	B2	20001221		
	EP 1003465	A1	20000531	EP 1998-922506	19980520
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6271260	B1	20010807	US 1999-424165	19991206

PRAI AU 1997-6902 A 19970520  
WO 1998-AU374 W 19980520

AB A compn. and method for retarding or preventing hair growth, wherein the  
compn. includes citric acid, an **electrolyte**, and a cosmetically  
acceptable aq. vehicle which includes a film forming agent. Thus, a  
compn. contained NaCl 3.0, citric acid 10.0, Lipomulse-165 0.5, Amigel  
0.6, **propylene glycol** 3.0, and water to 100% by wt.

ST hair growth prevention citrate **electrolyte**; salt citrate hair  
depilatory

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(C16-18, ethoxylated, lipocol SC 20; citric and **electrolyte**  
compns. for prevention/retardation of hair growth)

IT Skin preparations (pharmaceutical)  
(astringents; citric and **electrolyte** compns. for  
prevention/retardation of hair growth)

IT Antiperspirants

Cosmetics

Deodorants

**Electrolytes**

Emulsifying agents

**Humectants**

Surfactants

Thickening agents

(citric and **electrolyte** compns. for prevention/retardation of  
hair growth)

IT Alkali metal salts

Alkaline earth salts

Clays, biological studies

Esters, biological studies

Paraffin oils  
Polysiloxanes, biological studies  
Proteins, general, biological studies  
Salts, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Cosmetics  
(depilatories; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Polyoxyalkylenes, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(derivs.; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Cosmetics  
(emollients; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Monoglycerides  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(ethoxylated coco, Cetiol HE; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Castor oil  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(ethoxylated; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(fatty; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Hair  
(growth prevention; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Castor oil  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(hydrogenated, ethoxylated, Arlacet 989; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(lanolin; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Cosmetics  
(lotions; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT Gums and Mucilages  
(of sclerotium, amigel; citric and **electrolyte** compns. for prevention/retardation of hair growth)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 77-92-9, Citric acid, biological studies 110-27-0, Isopropyl myristate 112-92-5, Stearyl alcohol 1327-41-9, Aluminum chlorohydrate 3687-46-5, Decyl oleate 7446-70-0, Aluminum chloride, biological studies 7631-86-9, Silica, biological studies 7647-14-5, **Sodium chloride**, biological studies 8029-05-8, Amerchol L 101 8050-81-5, Simethicone 9002-92-0 9004-98-2 9004-99-3, PEG stearate 9005-12-3, Phenyl Dimethicone 9005-25-8, Starch, biological studies 9006-65-9, Dimethicone 11099-07-3, Glyceryl stearate 14807-96-6, Talc, biological studies 16958-85-3, Octyl palmitate 25322-68-3D, PEG, derivs. 31230-04-3, Methylphenylsilanediol homopolymer 31694-55-0, Liponic EG 1

36653-82-4, Cetyl alcohol 61711-80-6, Zirconium chlorohydrate  
68936-95-8, Tegocare PS 69522-24-3, Arlacel 481 84750-06-1, Arlacel  
165  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(citric and electrolyte compns. for prevention/retardation of  
hair growth)

L42 ANSWER 12 OF 19 USPATFULL on STN

DETD The core composition is also ideally suited for the manufacture of a clear antiperspirant composition. A particular advantage of the invention is the formulation of a clear, high viscosity antiperspirant cream using the most effective anti-perspirant active available and at the highest concentration allowed by law which is 20% of aluminum zirconium tetrachlorohydrex gly. The invention, however, is not limited to the use of aluminum zirconium tetrachlorohydrex gly since the more economical but slightly less effective aluminum chlorohydrate can be used. Another advantage of the invention is that urea may be added to the aluminum zirconium complex which further reduces, prevents and heals skin irritation in the high viscosity cream. The preferred range of core components when the core is used as the basis for an antiperspirant is also about 20-40% water, 8-20% cetyl dimethicone copolyol, 10-35% cyclomethicone and about 8-25% of one or more salts. The composition may additionally contain one or more of the additional ingredients mentioned previously and in particular **humectants**, solvents, emulsifiers, thickeners or masking agents are desirable. In the anti-perspirant composition the **humectant** may be urea, **propylene glycol** or both. The salts may be inorganic salts such as one or more of **sodium chloride**, sodium thiosulfate, alone or in conjunction with antiperspirant actives such as aluminum zirconium tetrachlorohydrex gly or aluminum chlorohydrate. A variety of solvents are desirable particularly SD-40 alcohol, isopropyl alcohol and other similar alcohols. Preferably the co-emulsifier is methoxy PEG-22 dodecylcopolymer or oleic acid derivatives included therein such as sorbitan oleate or glycyrrhizic acid or its derivatives. A masking agent may be desirable to mask any medicinal odors. Ethylene brassylate, for example, is suitable for this use.

PI

US 5162378

19921110

L48 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1994:697044 CAPLUS  
DN 121:297044  
TI Minimum water activity for the growth of *Aeromonas hydrophila* as affected by strain, temperature and humectant  
AU Santos, J.; Lopez-Diaz, Teresa-Maria; Garcia-Lopez, Maria-Luisa; Garcia-Fernandez, Maria-Camino; Otero, A.  
CS Veterinary Faculty, University of Leon, Leon, Spain  
SO Letters in Applied Microbiology (1994), 19(2), 76-8  
CODEN: LAMIE7; ISSN: 0266-8254  
DT Journal  
LA English  
CC 10-6 (Microbial, Algal, and Fungal Biochemistry)  
AB The influence of water activity (adjusted with three humectants: sodium chloride, glycerol and polyethylene glycol) on the growth of three strains of *Aeromonas hydrophila* at 28, 10 and 3.8.degree.C was studied. Min. water activity for growth (MWAG) of *A. hydrophila* varied with strain, temp. and type of humectant. MWAG ranged from 0.940 to 0.973 (28.degree.C), 0.959 to 0.980 (10.degree.C) and 0.975 to 0.980 (3.8.degree.C).  
ST water activity Aeromonas growth temp humectant  
IT Activity  
Aeromonas hydrophila  
Humectants  
Temperature effects, biological  
(min. water activity for the growth of *Aeromonas hydrophila* as affected by strain, temp. and humectant)  
IT 56-81-5, Glycerol, biological studies 7647-14-5, Sodium chloride, biological studies 7732-18-5, Water, biological studies 25322-68-3, Polyethylene glycol  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(min. water activity for the growth of *Aeromonas hydrophila* as affected by strain, temp. and humectant)

L54 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1962:53865 CAPLUS  
DN 56:53865  
OREF 56:10302c-d  
TI Sodium lactate in cosmetics  
AU Barber, A. L.  
CS Bowmans Chem. Ltd., Wildnes, UK  
SO Perfumery and Essential Oil Record (1961), 52, 715-20  
CODEN: PEORAA; ISSN: 0369-8998  
DT Journal  
LA Unavailable  
CC 40 (Essential Oils and Cosmetics)  
AB Na lactate (I) is an effective humectant in cosmetic preps., is generally compatible with other cosmetic ingredients, and does not hinder the prepn. of stable emulsions. The spreading and emollient qualities of creams and lotions prep'd. with I are comparable with those obtained with other humectants. I in combination with lactic acid serves as a buffer as well as a humectant, with moisture loss from such solns. reasonably independent of pH. The low cost of I is an advantage. I is not recommended with high concns. of soap in aq. soln. Its humectant performance in antiperspirant formulations is not good. Hair-set formulations contg. poly(vinylpyrrolidone) and I are sensitive to moisture.  
IT Buffer substances and Buffer systems  
      (lactic acid and Na lactate as, in cosmetics)  
IT Cosmetics  
      (sodium lactate as humectant and Na lactate-lactic acid as buffer and humectants in)  
IT Humectants  
      (sodium lactate as, in cosmetics)  
IT Hair  
      (wave-setting compns. for, Na lactate in)  
IT 72-17-3, Sodium lactate  
      (as humectants in cosmetics)  
IT 50-21-5, Lactic acid  
      (buffers and hemectants from Na lactate and, for cosmetics)  
IT 145-13-1, Pregn-5-en-20-one, 3. $\beta$ .-hydroxy-  
      (in cosmetics and dermatology)

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(FILE 'HOME' ENTERED AT 23:27:40 ON 27 JUL 2003)

FILE 'CAPLUS, SCISEARCH, EMBASE, BIOSIS, USPATFULL' ENTERED AT 23:28:25  
ON 27 JUL 2003

L1 2321 FILE CAPLUS  
L2 158 FILE SCISEARCH  
L3 106 FILE EMBASE  
L4 283 FILE BIOSIS  
L5 12843 FILE USPATFULL  
TOTAL FOR ALL FILES  
L6 15711 S HUMECTANT  
L7 565 FILE CAPLUS  
L8 36 FILE SCISEARCH  
L9 47 FILE EMBASE  
L10 69 FILE BIOSIS  
L11 6068 FILE USPATFULL  
TOTAL FOR ALL FILES  
L12 6785 S SKIN AND L6  
L13 138 FILE CAPLUS  
L14 4 FILE SCISEARCH  
L15 10 FILE EMBASE  
L16 2 FILE BIOSIS  
L17 4749 FILE USPATFULL  
TOTAL FOR ALL FILES  
L18 4903 S L12 AND ((PROPYLENE GLYCOL) OR PG OR (PROPANE-DIOL))  
L19 6 FILE CAPLUS  
L20 0 FILE SCISEARCH  
L21 1 FILE EMBASE  
L22 0 FILE BIOSIS  
L23 2139 FILE USPATFULL  
TOTAL FOR ALL FILES  
L24 2146 S L18 AND ((SODIUM CHLORIDE) OR (SODIUM (3W) CHLORIDE) OR ELECT  
L25 352 FILE CAPLUS  
L26 30 FILE SCISEARCH  
L27 35 FILE EMBASE  
L28 59 FILE BIOSIS  
L29 2005 FILE USPATFULL  
TOTAL FOR ALL FILES  
L30 2481 S HUMECTANT (1S) SKIN  
L31 30 FILE CAPLUS  
L32 3 FILE SCISEARCH  
L33 2 FILE EMBASE  
L34 1 FILE BIOSIS  
L35 558 FILE USPATFULL  
TOTAL FOR ALL FILES  
L36 594 S L30 (1S) ((PROPYLENE GLYCOL) OR PG OR (PROPANE-DIOL))  
L37 1 FILE CAPLUS  
L38 0 FILE SCISEARCH  
L39 0 FILE EMBASE  
L40 0 FILE BIOSIS  
L41 18 FILE USPATFULL  
TOTAL FOR ALL FILES  
L42 19 S L36 (1S) ((SODIUM CHLORIDE) OR (SODIUM (3W) CHLORIDE) OR ELEC  
L43 1 FILE CAPLUS  
L44 0 FILE SCISEARCH  
L45 0 FILE EMBASE  
L46 0 FILE BIOSIS  
L47 0 FILE USPATFULL  
TOTAL FOR ALL FILES  
L48 1 S 1994:697044/AN  
L49 1 FILE CAPLUS  
L50 0 FILE SCISEARCH

L51 0 FILE EMBASE  
L52 0 FILE BIOSIS  
L53 0 FILE USPATFULL  
TOTAL FOR ALL FILES  
L54 1 S 1962:53865/AN

L71 ANSWER 7 OF 7 USPATFULL

ACCESSION NUMBER: 2000:128394 USPATFULL  
TITLE: Method for regulating hair growth  
INVENTOR(S): Bradbury, Barton James, West Chester, OH, United States  
Soper, Shari Joy, Cincinnati, OH, United States  
Kaczvinsky, Jr., Joseph Robert, Cincinnati, OH, United States  
Bailey, Dorothy Limerick, Fairfield, OH, United States  
Gale, Celeste Dawn, Hamilton, OH, United States  
PATENT ASSIGNEE(S): The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6124362		20000926
APPLICATION INFO.:	US 1999-353408		19990715 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-93285P	19980717 (60)
	US 1999-122925P	19990305 (60)
	US 1998-102449P	19980930 (60)
	US 1998-102448P	19980930 (60)
	US 1998-102539P	19980930 (60)
	US 1998-102458P	19980930 (60)
	US 1998-102437P	19980930 (60)
	US 1999-136996P	19990601 (60)
	US 1999-137024P	19990601 (60)
	US 1999-137022P	19990601 (60)
	US 1999-137023P	19990601 (60)
	US 1999-137052P	19990601 (60)
	US 1999-137063P	19990601 (60)
	US 1999-136958P	19990601 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Jarvis, William R.A.  
ASSISTANT EXAMINER: Kim, Vickie  
LEGAL REPRESENTATIVE: Rosnell, Tara M., Hilton, Michael E., Rasser, Jacobus C.

NUMBER OF CLAIMS: 10  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1662

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM Non-limiting examples of **penetration enhancers** which may be used as optional activity enhancers herein include, for example, 2-methyl propan-2-ol, propan-2-ol, ethyl-2-hydroxypropanoate, hexan-2,5-diol, POE(2) ethyl ether, di(2-hydroxypropyl) ether, pentan-2,4-diol, acetone, POE(2) methyl ether, 2-hydroxypropionic acid, 2-hydroxyoctanoic acid, propan-1-ol, 1,4-dioxane, tetrahydrofuran, butan-1,4-diol, propylene glycol dipelargonate, polyoxypropylene 15 stearyl ether, octyl alcohol, POE ester of oleyl alcohol, oleyl alcohol, lauryl alcohol, dioctyl adipate, dicapryl adipate, di-isopropyl adipate, di-isopropyl sebacate, dibutyl sebacate, diethyl sebacate, dimethyl sebacate, dioctyl sebacate, dibutyl suberate, dioctyl azelate, dibenzyl sebacate, dibutyl phthalate, dibutyl azelate, ethyl myristate, dimethyl azelate, butyl myristate, dibutyl succinate, didecyl phthalate, decyl oleate, ethyl caproate, ethyl salicylate, iso-propyl palmitate, ethyl laurate, 2-ethyl-hexyl pelargonate, iso-propyl isostearate, butyl laurate, benzyl benzoate, butyl benzoate, hexyl laurate, ethyl caprate, ethyl caprylate, butyl stearate, benzyl salicylate, 2-hydroxypropanoic acid, 2-hydroxyoctanoic acid, methylsulfoxide, N,N-dimethyl acetamide,

N,N-dimethyl formamide, 2-pyrrolidone, 1-methyl-2-pyrrolidone, 5-methyl-2-pyrrolidone, 1,5-dimethyl-2-pyrrolidone, 1-ethyl-2-pyrrolidone, phosphine oxides, sugar esters, tetrahydrofurfural alcohol, **urea**, diethyl-m-toluamide,, 1-dodecylazacycloheptan-2-one and those described in U.S. Pat. No. 5,015,470, issued May 14, 1991 and U.S. Pat. No. 5,496,827, issued Jul. 15, 1994 (both of which are herein incorporated in its entirety by reference).

SUMM Other classes of optional activity enhancers for use herein include flavinoids, **ascomycin** derivatives and analogs, histamine antagonists such as diphenhydramine hydrochloride, other triterpenes such as oleanolic acid and ursolic acid and those described in U.S. Pat. No. 5,529,769, JP 10017431, WO 95/35103, U.S. Pat. No. 5,468,888, JP 09067253, WO 92/09262, JP 62093215, U.S. Pat. No. 5,631,282, U.S. Pat. No. 5,679,705, JP 08193094, saponins such as those described in EP 0,558,509 to Bonte et al, published Sep. 8, 1993 and WO 97/01346 to Bonte et al, published Jan. 16, 1997 (both of which are herein incorporated by reference in their entirety), proeoglycanase or glycosaminoglycanase inhibitors such as those described in U.S. Pat. No. 5,015,470, issued May 14, 1991, U.S. Pat. No. 5,300,284, issued Apr. 5, 1994 and U.S. Pat. No. 5,185,325, issued Feb. 9, 1993 (all of which are herein incorporated in their entirety by reference) estrogen agonists and antagonists, pseudoterins, cytokine and growth factor promotors, analogs or inhibitors such as interleukin1 inhibitors, interleukin-6 inhibitors, interleukin-10 promoters, and tumor necrosis factor inhibitors, vitamins such as vitamin D analogs and parathyroid hormone antagonists, Vitamin B12 analogs and panthenol, interfuron agonists and antagonists, hydroxyacids such as those described in U.S. Pat. No. 5,550,158, benzophenones and hydantoin anticonvulsants such as phenytoin.

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L9 ANSWER 25 OF 25 USPATFULL on STN  
AN 90:79885 USPATFULL  
TI Formulations of heterocyclic compounds  
IN Jones, Trevor M., Sanderstead, England  
White, Alan R., Meopham, England  
PA Burroughs Wellcome Co., Research Triangle Park, NC, United States (U.S.  
corporation)  
PI US 4963555 19901016  
AI US 1989-317129 19890301 (7)  
RLI Continuation of Ser. No. US 1986-825956, filed on 4 Feb 1986, now  
abandoned And a continuation of Ser. No. US 1981-279861, filed on 2 Jul  
1981, now abandoned which is a continuation-in-part of Ser. No. US  
1980-202339, filed on 30 Oct 1980, now abandoned  
PRAI GB 1980-23645 19800718  
DT Utility  
FS Granted  
LN.CNT 323  
INCL INCLM: 514/262.000  
NCL NCLM: 514/263.380  
IC [5]  
ICM: A61K031-52  
EXF 514/262  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 25 ibib, ab

L9 ANSWER 25 OF 25 USPATFULL on STN  
ACCESSION NUMBER: 90:79885 USPATFULL  
TITLE: Formulations of heterocyclic compounds  
INVENTOR(S): Jones, Trevor M., Sanderstead, England  
White, Alan R., Meopham, England  
PATENT ASSIGNEE(S): Burroughs Wellcome Co., Research Triangle Park, NC,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4963555		19901016
APPLICATION INFO.:	US 1989-317129		19890301 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1986-825956, filed on 4 Feb 1986, now abandoned And a continuation of Ser. No. US 1981-279861, filed on 2 Jul 1981, now abandoned which is a continuation-in-part of Ser. No. US 1980-202339, filed on 30 Oct 1980, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1980-23645	19800718
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Goldberg, Jerome D.	
LEGAL REPRESENTATIVE:	Brown, Donald	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
LINE COUNT:	323	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A topical pharmaceutical formulation for use in treating virus  
infections of the skin or mucosa and containing  
9-(2-hydroxyethoxymethyl) guanine or a salt or ester thereof which  
comprises a dispersed oil phase and a continuous aqueous phase  
containing therein water, at least 30% of a polyhydric alcohol (by  
weight of the formulation) and solubilized acyclovir.

L6 ANSWER 1 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 56-81-5, Glycerin, biological studies 67-64-1, Acetone, biological studies 107-88-0, 1,3-Butylene glycol 123-86-4, Butyl acetate 141-78-6, Ethyl acetate, biological studies 7447-40-7, Potassium chloride, biological studies 7647-14-5, **Sodium chloride**, biological studies 7786-30-3, Magnesium chloride, biological studies 10043-52-4, Calcium chloride, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(two-layer nail enamel removers with **emollient** and  
moisturizing effect contg. Et or Bu acetate, acetone, electrolytes, and  
polyols)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2003048815	A2	20030221	JP 2001-234286	20010801
AN 2003:132323	CAPLUS			
DN 138:158567				

L6 ANSWER 2 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
AB The effect of selected humectants on sulfosulfuron and glyphosate efficacy and sulfosulfuron spray deposit characteristics were studied.  
**Humectants** were glycerol, sorbitol, ethylene glycol, propylene glycol, various polyethylene glycols, **sodium lactate**, and calcium nitrate. Sulfosulfuron was applied to green foxtail and glyphosate to wheat, with and without nonionic surfactants, and with and without humectant in distd. water. None of the **humectants** substantially increased glyphosate efficacy, and **sodium lactate** and calcium nitrate were antagonistic. In the presence of nonionic surfactant, sodium lactate and calcium nitrate caused the greatest increase. . . water) spray deposit. Water retained in sulfosulfuron spray mixt. deposits measured on watch glasses was greater with calcium nitrate and **sodium lactate** than with glycerol, sorbitol, propylene glycol or polyethylene glycol **humectants**. These data demonstrate the potential for enhancing efficacy of sulfosulfuron by using selected humectants as components of an adjuvant.

IT 50-70-4, Sorbitol, uses 56-81-5, Glycerol, uses 57-55-6, Propylene glycol, uses 72-17-3, **Sodium lactate** 107-21-1, Ethylene glycol, uses 10124-37-5, Calcium nitrate 25322-68-3, Polyethylene glycol  
RL: MOA (Modifier or additive use); USES (Uses)  
(effect of **humectants** of sulfosulfuron and glyphosate efficacy)

AN 2002:968421 CAPLUS  
DN 138:149000

L6 ANSWER 3 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 56-81-5, Glycerol, uses 67-63-0, Isopropanol, uses 127-08-2, Potassium acetate 7647-14-5, **Sodium chloride**, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(cathodic protection system of reinforced concrete structures with thermally-sprayed zinc or zinc alloy anodes using **humectant**)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----

PI US 6471851 B1 20021029 US 1997-839292 19970417  
US 6033553 A 20000307 US 1999-236731 19990125  
US 6217742 B1 20010417 US 1999-451173 19991130

AN 2002:830158 CAPLUS  
DN 137:301301

L6 ANSWER 4 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 56-81-5, Glycerol, uses 102-76-1, Triacetin 7647-14-5, **Sodium chloride**, uses 7790-53-6, Potassium polymetaphosphate

RL: MOA (Modifier or additive use); USES (Uses)  
 (humectant in environmentally friendly soap-based pesticides)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001091555	A2	20011206	WO 2001-US17243	20010524
	WO 2001091555	A3	20020404		
		W:	AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
		RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	EP 1283673	A2	20030219	EP 2001-941658	20010524
		R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		
	US 2003060379	A1	20030327	US 2002-288873	20021106
AN	2001:885633	CAPLUS			
DN	136:1875				
L6	ANSWER 5 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN				
AB	glycol having av. mol. wt. 200-1000, sorbitol, propylene glycol, 1,3-butyleneglycol, glycine betaine, pyrrolidone carboxylic acid or salt, maltitol, and sodium lactate as a humectant; and one or more of sodium CM-cellulose, starch, denatured starch, guar gum, poly(vinyl alc.), and polyacrylamide as a dry paper.				
IT	50-70-4, Sorbitol, uses 56-81-5, 1,2,3-Propanetriol, uses 57-55-6, 1,2-Propanediol, uses 72-17-3, Sodium lactate 98-79-3 98-79-3D, Pyrrolidone carboxylic acid, salts 107-43-7, Glycine betaine 107-88-0, 1,3-Butylene glycol 585-88-6, Maltitol 25322-68-3 59113-36-9, Diglycerol				
	RL: MOA (Modifier or additive use); USES (Uses) (humectant; water-disintegratable paper having moisture retaining property for wipes)				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5935384	A	19990810	US 1997-897653	19970721
AN	1999:502704	CAPLUS			
DN	131:131425				
L6	ANSWER 6 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN				
IT	50-70-4, Sorbitol, biological studies 7647-14-5, Sodium chloride, biological studies 25322-68-3				
	RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (specificity of hydrolysis of caseins by lactocepin III from Lactococcus lactis subsp. cremoris SK11 in different humectant systems contg.)				
AN	1999:433558	CAPLUS			
DN	131:198784				
L6	ANSWER 7 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN				
IT	50-70-4, Sorbitol, biological studies 56-81-5, 1,2,3-Propanetriol, biological studies 57-13-6, Urea, biological studies 72-17-3, Sodium lactate 98-79-3 111-29-5, Pentyleneglycol 9004-61-9, Hyaluronic acid 9067-32-7, Sodium hyaluronate 28874-51-3, Sodium L-pyroglutamate 29348-79-6, Pentanediol				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (humectant; skin protection prepn. contg. activated aluminum chlorhydrate)				

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 925783	A1	19990630	EP 1998-811237	19981216
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AN	CH 692238	A	20020415	CH 1997-2884	19971216
AN	1999:425544 CAPLUS				
DN	131:63449				

L6 ANSWER 8 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 AB Water-sol. lubricants contg. water-sol. **humectants** such as **sodium lactate** and trimethylglycine and lubricating agents such as gum arabic and sodium alginate for condoms and the water-sol. lubricant-treated condoms are.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11021230	A2	19990126	JP 1997-178192	19970703
AN	1999:70165 CAPLUS				
DN	130:130029				

L6 ANSWER 9 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 50-70-4, Sorbitol, biological studies 56-81-5, Glycerol, biological studies 471-34-1, Calcium carbonate, biological studies 497-19-8, Sodium carbonate, biological studies 584-08-7, Potassium carbonate 1305-62-0, Calcium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 7647-14-5, **Sodium chloride**, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (prodn. of intermediate moisture foods comprising alkali and **humectant**)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9848644	A1	19981105	WO 1998-EP2314	19980420
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM.				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AN	AU 9875274	A1	19981124	AU 1998-75274	19980420
AN	1998:739519 CAPLUS				
DN	129:342962				

L6 ANSWER 10 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 72-17-3, **Sodium lactate** 98-79-3D, Pyrrolidonecarboxylic acid, salts 107-21-1, Ethylene glycol, biological studies 107-43-7, Trimethylglycine 676-46-0, Sodium malate 9000-01-5, Arabic gum 9000-21-9, Furcellaran 9003-03-6, Ammonium polyacrylate 9003-04-7, Sodium polyacrylate 9003-39-8, PVP 9004-54-0, Dextran, biological studies 9057-02-7, Pullulan 9063-38-1, Sodium starch glycolate 28805-15-4, Ammonium polymethacrylate  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (water-sol. lubricants for condoms contg. sliminess agents and penetrating agents and **humectants**)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 860172	A2	19980826	EP 1997-122426	19971218
	EP 860172	A3	20000823		
	EP 860172	B1	20030618		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

JP 10182433 A2 19980707 JP 1996-340909 19961220  
 JP 10298060 A2 19981110 JP 1997-110521 19970428  
 AN 1998:585824 CAPLUS  
 DN 129:193760

L6 ANSWER 11 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 7647-14-5, **Sodium chloride**, uses  
 RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (concrete blocks treated with NaCl: **humectants** applied to cathodic protection systems using conductive paint anode or thermally-sprayed zinc or zinc alloy anodes applied to surface of reinforced concrete structures)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9816670	A1	19980423	WO 1997-US18848	19971010
W: AU, CA, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9850824	A1	19980511	AU 1998-50824	19971010
AN 1998:251295 CAPLUS				
DN 129:9984				

L6 ANSWER 12 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 50-21-5, Lactic acid, uses 72-17-3, **Sodium lactate**  
 98-79-3, Pyrrolidone carboxylic acid 996-31-6, Potassium lactate  
 4810-50-8 28874-51-3  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**humectant**; elec. conductive compns. for bioelectrodes with low impedance between electrode and skin)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09038057	A2	19970210	JP 1995-191448	19950727
JP 3398809	B2	20030421		
US 5821280	A	19981013	US 1996-687920	19960726
AN 1997:262154 CAPLUS				
DN 126:239181				

L6 ANSWER 13 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 57-13-6, Urea, uses 72-17-3, **Sodium lactate**  
 996-31-6, Potassium lactate 28874-51-3 158091-79-3  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**humectant-plasticizer**; elec. conductive compns. for bioelectrodes with low impedance between electrode and skin)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09025383	A2	19970128	JP 1995-174749	19950711
US 6495627	B1	20021217	US 1996-678178	19960711
AN 1997:218394 CAPLUS				
DN 126:212843				

L6 ANSWER 14 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 57-13-6, Urea, uses 72-17-3, **Sodium lactate**  
 996-31-6, Potassium lactate 28874-51-3 158091-79-3  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**humectant** agents; elec. conductive compns. for bioelectrodes with low impedance between electrode and skin)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09024030	A2	19970128	JP 1995-174750	19950711
US 6495627	B1	20021217	US 1996-678178	19960711
AN 1997:218384 CAPLUS				
DN 126:212838				

L6 ANSWER 15 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

AB . . . nutritional, medicinal, therapeutic, oral hygiene and the like assistance. A taste masking compn. was prep'd. by addn. 1 g of **sodium chloride** to 350 g of glycerin as **humectant** with stirring at room temp. Subjects rinsed 30 mL of a mouth rinse contg. 3 g benzoic acid/L for a. . .

IT 50-70-4, D-Glucitol, biological studies 56-03-1D, Biguanide, derivs. 56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6, 1,2-Propanediol, biological studies 65-85-0, Benzoic acid, biological studies 144-55-8, Sodium bicarbonate, biological studies 298-14-6, Potassium bicarbonate 497-19-8, Sodium carbonate, biological studies 584-08-7, Potassium carbonate 7447-40-7, Potassium chloride, biological studies 7646-85-7, Zinc chloride, biological studies 7647-14-5, **Sodium chloride** (NaCl), biological studies 7761-88-8, Silver nitrate, biological studies 9000-69-5, Pectins 16283-36-6, Zinc salicylate 94276-84-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(astringent taste-masking compns. comprising **humectant** and salt)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9637183	A2	19961128	WO 1996-US5896	19960426
WO 9637183	A3	19970313		
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AN AU 9656688	A1	19961211	AU 1996-56688	19960426
DN 1997:67421	CAPLUS			
DN 126:79789				

L6 ANSWER 16 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT 50-21-5D, Lactic acid, salts 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies 56-45-1, Serine, biological studies 72-17-3, **Sodium lactate** 98-79-3D, Pyrrolidonecarboxylic acid, salts 7585-39-9D, .beta.-Cyclodextrin, hydroxyalkyl 7585-39-9D, .beta.-Cyclodextrin, hydroxypropyl 9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(skin cosmetics contg. natural water with/without **humectants**)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 08231369	A2	19960910	JP 1995-56594	19950220
AN 1996:664901	CAPLUS			
DN 125:284389				

L6 ANSWER 17 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT 67-64-1, Acetone, uses 72-17-3, **Sodium lactate**

RL: NUU (Other use, unclassified); USES (Uses)

(in purifn.; prepn. of low-mol.-wt. acetylated hyaluronic acid as emollient)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI WO 9605233	A1	19960222	WO 1995-JP1613	19950811
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 08053501	A2	19960227	JP 1994-210611	19940811
EP 725083	A1	19960807	EP 1995-928025	19950811
EP 725083	B1	20011128		
R: DE, FR, GB, IT				
JP 09071602	A2	19970318	JP 1996-139405	19960508
US 5679657	A	19971021	US 1996-624634	19960802
AN 1996:340662	CAPLUS			
DN 125:18688				

L11 ANSWER 18 OF 106 USPATFULL on STN

DETD Generally, the **humectant** can be comprised of any material that is able to absorb and retain water, or bind water, such as, for. . . alcohols, certain saccharides, salts and mixtures thereof. Examples of usable alcohols include monohydric alcohols, diols, and/or polyols. More specifically, glycerol, **propylene glycol**, sorbitol, mannitol, and 1,2-propanediol. **Sodium chloride**, carboxymethylcellulose, sodium lactate and monosodium glutamate are also useful as **humectants** or water binders. Salts of any of these **humectants** or any other type of **humectant** are also useful. Although some sugars have **humectant** properties, the sweetness sugar imparts is not desirable in a savory filling. Therefore, it is preferred that the savory filling. . .

PI

US 6322829

B1 20011127

L11 ANSWER 29 OF 106 USPATFULL on STN

SUMM Examples of suitable **humectants** include C.sub.2 to C.sub.4 alkane diols, such as ethane-1,2-diol and its corresponding dimer and trimer, **propane-1,2-diol**, **butane-1,3-diol**, or polymers thereof, such as polyethane diol having a molecular weight of up to 10,000 and polypropane diol having a molecular weight of up to 400. Further examples of **humectants** are "moisturisers" such as sodium pyrrolidone carboxylate, sodium lactate, triethanolamine lactate and **sodium chloride**.

PI

US 4507319

19850326

L11 ANSWER 11 OF 106 USPATFULL on STN

DETD [0049] A preferred **humectant** for use in the invention is calcium chloride. Examples of other **humectants** are glycerol, sorbitol, ethylene glycol, PEG, **propylene glycol**, 1,3 butylene glycol, PCA (2-Pyrrolidone-5-carboxylic acid), sodium sulphate, sodium hydroxide, lactic acid and derivatives, **sodium chloride** and the like. Those skilled in the art will have no difficulty in selecting suitable **humectants** having regard to the construction materials in the system and the composition of the filter based on the disclosure herein contained. Some **humectants** also act as surfactants. One example is sodium dioctylsulphosuccinate.

CLM What is claimed is:

11. A composition according to any one of claims 4 to 10 wherein the **humectant** is selected from calcium chloride, glycerol, sorbitol, ethylene glycol, PEG, **propylene glycol**, 1,3 butylene glycol, PCA (2-Pyrrolidone-5-carboxylic acid), sodium sulphate, sodium hydroxide, lactic acid and derivatives thereof, **sodium chloride** and sodium dioctylsulphosuccinate.

PI US 2003116022 A1 20030626

L6 ANSWER 18 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
 IT 50-70-4, Sorbitol, biological studies 52-90-4, Cysteine, biological studies 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 60-23-1, Cysteamine 60-24-2 67-63-0, Isopropanol, biological studies 68-11-1, Thioglycolic acid, biological studies 72-17-3, **Sodium lactate** 79-42-5, Thiolactic acid 96-27-5, Thioglycerol 107-21-1, Ethylene glycol, biological studies 107-96-0,  $\beta$ -Mercaptopropionic acid 142-26-7, N-Acetylethanolamine 504-63-2, 1,3-Propanediol 584-04-3 616-91-1, N-Acetyl cysteine 758-08-7, Thioglycolamide 760-30-5 2485-62-3, Cysteine methyl ester 3375-50-6,  $\beta$ -Mercapto-ethane sulfonic acid 3411-58-3, Cysteine ethyl ester 3483-12-3, Dithiothreitol 7631-90-5, Sodium bisulfite 7634-42-6 7757-83-7, Sodium sulfite 7773-03-7, Potassium bisulfite 10117-38-1, Potassium sulfite 10192-30-0, Ammonium bisulfite 10196-04-0, Ammonium sulfite 10593-85-8, Homocysteine thiolactone 13762-51-1, Potassium borohydride 16940-66-2, Sodium borohydride 20938-74-3, N-Methyl mercapto-acetamide 21109-95-5, Barium sulfide 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25265-75-2, Butylene glycol 26691-13-4, 1,3-Dimercapto-2-aminopropane 28713-50-0, 1-Phenyl-2-mercaptoethanol 30232-12-3, Mercaptopropionic acid 37675-88-0 51621-19-3 68148-42-5, Glycerol monothioglycolate 89020-05-3 89020-06-4 89020-07-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(combined two-part reducing agent/**humectant** shaving system for improved shaving comfort)

PATENT NO. KIND DATE APPLICATION NO. DATE

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 PI WO 9531960 A1 19951130 WO 1995-US6011 19950516  
   W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,  
   GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,  
   MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,  
   TM, TT  
   RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,  
   LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,  
   SN, TD, TG  
 US 5500210 A 19960319 US 1994-247915 19940523  
 ZA 9503797 A 19960115 ZA 1995-3797 19950510  
 CA 2190959 AA 19951130 CA 1995-2190959 19950516  
 AU 9524383 A1 19951218 AU 1995-24383 19950516  
 EP 760646 A1 19970312 EP 1995-918438 19950516  
 EP 760646 B1 20000105  
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE  
 CN 1149251 A 19970507 CN 1995-193242 19950516  
 BR 9507748 A 19970819 BR 1995-7748 19950516  
 JP 10500683 T2 19980120 JP 1995-530345 19950516  
 AT 188372 E 20000115 AT 1995-918438 19950516  
 ES 2142478 T3 20000416 ES 1995-918438 19950516  
 AU 9942386 A1 19990930 AU 1999-42386 19990730  
 AN 1996:128050 CAPLUS  
 DN 124:155671

L6 ANSWER 19 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

AB . . . toxin levels 10 to 100 times lower than those of high aw. This effect was obsd. using both glycerol or **sodium chloride** as **humectants**.

AN 1995:790480 CAPLUS  
 DN 123:193259

L6 ANSWER 20 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT 50-21-5, Lactic acid, uses 50-70-4, Sorbitol, uses 56-81-5, Glycerol, uses 57-55-6, Propylene glycol, uses 60-35-5D, Acetamide, derivs. 72-17-3, **Sodium lactate** 112-27-6, Triethylene glycol 142-26-7, N-(2-Hydroxyethyl) acetamide 2043-43-8D, Lactamide, derivs.

IT 56-81-5, Glycerol, biological studies 72-17-3, **Sodium lactate**  
RL: BIOL (Biological study)  
(as **humectant**, herbicide and fungicide efficacy response to)  
AN 1991:650341 CAPLUS  
DN 115:250341

L6 ANSWER 26 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 50-70-4, Sorbitol, biological studies 56-40-6, Glycine, biological  
studies 56-81-5, Glycerol, biological studies 57-50-1, Sucrose,  
biological studies 7647-14-5, **Sodium chloride**,  
biological studies 36675-34-0, Hexaglycerol  
RL: BIOL (Biological study)  
(**humectant** for food, sorption curves of)  
AN 1988:491430 CAPLUS  
DN 109:91430

L6 ANSWER 27 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 72-17-3, **Sodium lactate** 107-88-0, 1,3-Butyleneglycol  
9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate  
RL: BIOL (Biological study)  
(**humectant**, for cosmetic makeups)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62238212	A2	19871019	JP 1986-82495	19860410
JP 07055885	B4	19950614		

AN 1988:118745 CAPLUS  
DN 108:118745

L6 ANSWER 28 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 7647-14-5, **Sodium chloride**, biological studies  
RL: BIOL (Biological study)  
(**humectants** improvement of intermediate-moisture beef and  
pork myosin extractability and water activity response to)  
AN 1988:54609 CAPLUS  
DN 108:54609

L6 ANSWER 29 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 50-70-4, Sorbitol, biological studies 50-99-7, Glucose, biological  
studies 56-81-5, Glycerol, biological studies 57-13-6, Urea,  
biological studies 57-48-7, Fructose, biological studies 57-50-1,  
Sucrose, biological studies 57-55-6, Propylene glycol, biological  
studies 69-79-4, Maltose 72-17-3, **Sodium lactate**  
142-47-2, Monosodium glutamate 149-87-1, DL-2-Pyrrolidone-5-carboxylic  
acid 25322-68-3, Polyethylene glycol 28874-51-3  
RL: BIOL (Biological study)

(**humectant**, for petrolatum-based water-in-oil emulsions, as  
skin moisturizers)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 216557	A2	19870401	EP 1986-306931	19860909
EP 216557	A3	19870616		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4690774	A	19870901	US 1985-774727	19850911
ZA 8606241	A	19870429	ZA 1986-6241	19860819
AU 8661753	A1	19870312	AU 1986-61753	19860822
JP 62091237	A2	19870425	JP 1986-210523	19860905
BR 8604293	A	19870505	BR 1986-4293	19860908
DK 8604327	A	19870312	DK 1986-4327	19860910
NO 8603626	A	19870312	NO 1986-3626	19860910
NO 171002	B	19921005		
NO 171002	C	19930113		
CN 86106153	A	19870603	CN 1986-106153	19860910
ES 2001671	A6	19880601	ES 1986-1744	19860910

CA 1283603 A1 19910430 CA 1986-518024 19860911  
US 4980084 A 19901225 US 1988-253446 19881005  
AN 1987:604934 CAPLUS  
DN 107:204934

L6 ANSWER 30 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol,  
biological studies 72-17-3, **Sodium lactate**  
107-21-1, Ethylene glycol, biological studies 73784-63-1  
RL: BIOL (Biological study)  
(**humectant**, creams contg., water retention capacity of  
stratum corneum in relation to)

AN 1987:520964 CAPLUS  
DN 107:120964

L6 ANSWER 31 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 57-13-6, Urea, uses and miscellaneous 72-17-3, **Sodium**  
**lactate** 97-59-6, Allantoin  
RL: USES (Uses)

(**humectants**, for bactericidal hand cleansers)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3543918	A1	19870619	DE 1985-3543918	19851212
AN 1987:498683	CAPLUS			
DN 107:98683				

L6 ANSWER 32 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Effect of food **humectant** on lowering water activity of casing  
Kamaboko. 2. Effect of lowering water activity of starch, glycine and  
**sodium lactate** and prediction of the water activity  
lowering ability of **humectants**  
AN 1982:216247 CAPLUS  
DN 96:216247

L6 ANSWER 33 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Effect of food **humectants** on lowering water activity of fish  
paste kamaboko. 1. Water activity lowering effectiveness of  
**sodium chloride**, sugars and polyols  
AN 1982:67420 CAPLUS  
DN 96:67420

L6 ANSWER 34 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
ST humectant intermediate moisture beef; meat sucrose humectant; glycerol  
beef humectant; **sodium chloride** beef **humectant**  
AN 1979:609553 CAPLUS  
DN 91:209553

L6 ANSWER 35 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
AB . . . to increase the corneum water content. Measurements of  
extensibility and water holding capacity in isolated animal corneum showed  
that conventional **humectants** such as glycerol [56-81-5],  
sorbitol [50-70-4] or **sodium lactate** [72-17-3] can be  
effective but that the effect is lost on rinsing the corneum in water.  
Isolated animal corneum adsorbed.  
AN 1975:144823 CAPLUS  
DN 82:144823

L6 ANSWER 36 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT 7647-14-5, **Sodium chloride**  
(angle of repose of dendritic, **humectant** effect on)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI BE 624145		19630215	BE	
AN 1965:437419	CAPLUS			

DN 63:37419  
OREF 63:6640g

L6 ANSWER 37 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN  
IT Friction

(of **sodium chloride** dendritic crystals, effect of  
coating with **humectant** on)

IT **Humectants**

(**sodium chloride** dendritic crystals coated with,  
angle of repose and)

IT 7647-14-5, **Sodium chloride**

(coating of dendritic crystals of, with **humectant**, angle of  
repose and)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	FR 1354136	19640306	FR	
	BE 624145		BE	
	GB 1016742		GB	

AN 1965:64751 CAPLUS

DN 62:64751

OREF 62:11453e

L6 ANSWER 38 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT Cosmetics

(**sodium lactate** as **humectant** and Na  
lactate-lactic acid as buffer and **humectants** in)

IT **Humectants**

(**sodium lactate** as, in cosmetics)

IT 72-17-3, **Sodium lactate**

(as **humectants** in cosmetics)

AN 1962:53865 CAPLUS

DN 56:53865

OREF 56:10302c-d

L6 ANSWER 39 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT Cosmetics

(**sodium lactate** as buffering **humectant**  
for)

IT 72-17-3, **Sodium lactate**

(as cosmetic buffering **humectant**)

AN 1961:78251 CAPLUS

DN 55:78251

OREF 55:14830a-b

9000-69-5, Pectins

RL: NUU (Other use, unclassified); USES (Uses)

(humectant; in formulation of dust-suppressing compns. contg.  
humectant)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2279962	A1	19950118	GB 1994-11372	19940607
	ZA 9404253	A	19950508	ZA 1994-4253	19940615
	BR 9402685	A	19950502	BR 1994-2685	19940712
	AU 9467403	A1	19950127	AU 1994-67403	19940713
AN	1995:518893	CAPLUS			
DN	122:297775				

L6 ANSWER 21 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

AB The influence of water activity (adjusted with three **humectants**:  
**sodium chloride**, glycerol and polyethylene glycol) on  
the growth of three strains of *Aeromonas hydrophila* at 28, 10 and  
3.8.degree.C was studied.. . .

IT 56-81-5, Glycerol, biological studies 7647-14-5, **Sodium chloride**, biological studies 7732-18-5, Water, biological studies 25322-68-3, Polyethylene glycol  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(min. water activity for the growth of *Aeromonas hydrophila* as affected by strain, temp. and **humectant**)

AN 1994:697044 CAPLUS  
DN 121:297044

L6 ANSWER 22 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

AB A review, with 61 refs. **Sodium lactate** is used as  
**humectant** and flavor enhancer in meat and poultry products, and  
there is growing evidence of antimicrobial properties of the salt.  
Potassium.

AN 1994:577906 CAPLUS  
DN 121:177906

L6 ANSWER 23 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

IT 72-17-3, **Sodium lactate**

RL: USES (Uses)  
(**humectant**, foamable conc. contg., with high stability, for  
fire extinguisher)

PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 9302788	A1	19930218	WO 1992-US6245	19920728
	W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
	US 5225095	A	19930706	US 1991-739648	19910802
	AU 9224228	A1	19930302	AU 1992-24228	19920728
AN	1993:150553	CAPLUS			
DN	118:150553				

L6 ANSWER 24 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

AB . . . and urea-type exptl. herbicide) and fungicides (phthalide and  
amide-type exptl. fungicide, etc.) was examd. in the presence or absence  
of **humectant** (glycerin or **sodium lactate**). . .

Depending on the concn. or the type of humectant incorporated, the  
pesticides showed different activities. The effect of humectants on. . .

AN 1993:34403 CAPLUS  
DN 118:34403

L6 ANSWER 25 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

SUMM When the compound of the present invention is used in the form of an **ointment**, it is contained in an amount of 0.01 to 10 w/w % in the **ointment**.

SUMM The **ointment** base which can be used includes oleaginous base (a natural wax such as white beeswax or carnauba wax, a petroleum wax such as solid paraffin or microcrystalline wax, a hydrocarbon wax such as liquid paraffin, white soft paraffin or yellow petrolatum, plastibase, zelen 50W, silicone, a vegetable oil, pork tallow, beef tallow, a simple **ointment** or lead oleate plaster), an emulsion type **ointment** base (an O/W type base such as a hydrophilic **ointment** or a vanishing cream or a W/O type base such as a hydrophilic petrolatum, a purified lanolin, aquahole, eucelin, neocelin, an absorptive **ointment**, a hydrated lanolin, cold cream, a hydrophilic plastibase), a water-soluble base (a macrogol **ointment** or solbase) or a suspension type **ointment** base (a lyogel base, i.e. a hydrogel base such as a non-fat **ointment**, a gelbase or lotion; or an FAPG base (a suspension of a microparticle of an aliphatic alcohol such as stearyl alcohol or cetyl alcohol in propylene glycol), and these **ointment** base can be used alone or in a combination of not less than two bases.

SUMM Further, when to be used as an **ointment**, the compound of the present invention is dissolved in a solubilizing and absorptive accelerating agent and added to the above-mentioned **ointment** base.

SUMM The solubilizing and absorptive accelerating agent to be used means the agent in which the compound of the present invention is soluble at a concentration of at least not less than 0.01 w/w % and which can accelerate the absorption of the compound of the present invention from skin when formulated as an **ointment**, and includes a lower alkanediol (e.g. ethylene glycol, propylene glycol or butylene glycol), an alkylene carbonate (e.g. propylene carbonate or ethylene carbonate), an alkanedicarboxylic acid ester (e.g. dimethyl adipate, diethyl adipate, diisopropyl adipate, diethyl pimelate, diethyl sebacate or dipropyl sebacate), a higher alkanoic acid glycerin ester (e.g. monolaurin, dilaurin or trilaurin), a higher alkenoic acid glycerin ester (e.g. monoolein, diolein or triolein), a higher alkanoic acid alkyl ester (e.g. isopropyl myristate or ethyl myristate), a higher unsaturated alcohol (e.g. geraniol or oleyl alcohol) or an azacycloalkane (e.g. 1-dodecylazacycloheptan-2-one). These solubilizing and absorptive accelerating agent can be used alone or in a mixture of not less than two agents, and can be added at a sufficient amount to dissolve the compound of the present invention. The amount generally ranges from 2 parts by weight to 200 parts by weight per one part by weight of the compound of the present invention. The upper amount is limited not to deteriorate the physicochemical properties of the **ointment**.

SUMM The **ointment** which contains the compound of the present invention may contain, in addition to the above-mentioned **ointment** base, other additives such as an emulsifier (e.g. polyoxyethylene hardened caster oil, glycerol monostearate, sorbitan sesquioleate or lauromacrogol); a suspending agent (e.g. polyoxyethylene glycol, polyvinylpyrrolidone or sodium carboxymethylcellulose); an antioxidant (e.g. a phenol or a quinone; a preservative (e.g. paraoxybenzoic acid ester); a **humectant** (e.g. glycerin, D-sorbitol or propylene glycol); a favoring agent, a coloring matter; an antiseptic; a higher alkenoic acid (e.g. oleic acid), and moreover other drugs which are useful for the treatment of a **skin** diseases.

SUMM The **ointment** of the present invention can be prepared by

mixing a solution containing the compound of the present invention with an **ointment** base in accordance with a conventional method. In the process of formulation, not less than one of the adjuvant or additive mentioned above can be simultaneously added to the **ointment** base. Furthermore, the **ointment** can be manufactured by dissolving the compound of the present invention in the solubilizing and absorptive accelerating agent, admixing the obtained solution with the **ointment** base, stirring the obtained mixture under heating, and then cooling the resultant mixture.

SUMM The **ointment** containing the compound of the present invention can be used by applying to the affected part of the skin once to several times (e.g. once to four times) a day.

SUMM The paste or liniment containing the compound of the present invention can be prepared by using the same base and according to the same method as those of the **ointment** as mentioned above.

SUMM The suppository containing the compound of the present invention may be in various forms such as a rectal suppository which is solid at the normal temperature and melts at a body temperature; an **ointment** or liquid enema which can be prepared by dissolving or suspending the compound of the present invention in a liquid base; a soft capsule for the rectal administration; or an injection for the rectal administration.

SUMM Moreover, the compound of the present invention can be used in combination with other **immunosuppressant**(s), steroid(s) (prednisolone, methylprednisolone, dexamethasone, hydrocortisone and the like) or nonsteroidal anti-inflammatory agent. As the other **immunosuppressant**, preferred is particularly selected from azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, tacrolimus monohydrate.

DETD 2-Amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol hydrochloride (hereunder referred to as compound (I), 1 g) was dissolved in 19 g of hydrophilic petrolatum under heating at 60.degree. C., and cooled with stirring to prepare an **ointment** containing 5% of Compound (I).

DETD Compound (I) (1 g) was mixed well with 19 g of plastibase (gelled hydrocarbon) in a mortar for about 30 minutes to prepare an **ointment** containing 5% of Compound (I).

CLM What is claimed is:

6. The method according to claim 1 or 2, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another **immunosuppressant**.
7. The method according to claim 1, wherein the other **immunosuppressant** is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
8. The method according to claim 7, wherein the other **immunosuppressant** is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
9. The method according to claim 1, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another **immunosuppressant**.
10. The method according to claim 2, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid

addition salt thereof is administered in combination with another **immunosuppressant**.

11. The method according to claim 2, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another **immunosuppressant**.
12. The method according to claim 5, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another **immunosuppressant**.
13. The method according to claim 6, wherein the other **immunosuppressant** is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
14. The method according to claim 9, wherein the other **immunosuppressant** is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
15. The method according to claim 10, wherein the other **immunosuppressant** is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
16. The method according to claim 11, wherein the other **immunosuppressant** is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
17. The method according to claim 12, wherein the other **immunosuppressant** is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
18. The method according to claim 7, wherein the other **immunosuppressant** is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
19. The method according to claim 14, wherein the other **immunosuppressant** is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
20. The method according to claim 15, wherein the other **immunosuppressant** is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
21. The method according to claim 16, wherein the other **immunosuppressant** is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
22. The method according to claim 17, wherein the other **immunosuppressant** is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.

Solid dosage forms for oral administration include capsules, tablets, pills, powders, and granules. In such solid dosage forms, the active compound is mixed with at least one inert, pharmaceutically acceptable excipient or carrier such as sodium citrate or dicalcium phosphate and/or a) fillers or extenders such as starches, lactose, sucrose, glucose, mannitol, and silicic acid, b) binders such as, for example, carboxymethylcellulose, alginates, gelatin, polyvinylpyrrolidone, sucrose, and acacia, c) **humectants** such as glycerol, d) disintegrating agents such as agar-agar, calcium carbonate, potato or tapioca starch, alginic acid, certain silicates, and sodium carbonate, e) solution retarding agents such as paraffin, f) absorption accelerators such as quaternary ammonium compounds, g) wetting agents such as, for example, cetyl alcohol and glycerol monostearate, h) absorbents such as kaolin and bentonite clay, and i) lubricants such as talc, calcium stearate, magnesium stearate, solid polyethylene glycols, sodium lauryl sulfate, and mixtures thereof. In the case of capsules, tablets and pills, the dosage form may also comprise buffering agents.

DETD A further form of topical administration is to the eye, as for the treatment of immune-mediated conditions of the eye such as autoimmune diseases, allergic or inflammatory conditions, and corneal transplants. The compound of the invention is delivered in a pharmaceutically acceptable ophthalmic vehicle, such that the compound is maintained in contact with the ocular surface for a sufficient time period to allow the compound to penetrate the corneal and internal regions of the eye, as for example the anterior chamber, posterior chamber, vitreous body, aqueous humor, vitreous humor, cornea, iris/ciliary, lens, choroid/retina and sclera. The pharmaceutically acceptable ophthalmic vehicle may, for example, be an **ointment**, vegetable oil or an encapsulating material.

DETD The compounds of the invention may be prepared using one or more of the processes which follow. The starting materials for use in these processes are preferably one of the macrolides isolated from culture media obtained in accordance with known methods by fermentation of microorganisms of the genus *Streptomyces*, which are disclosed in European Patent Application No. 0184162. Samples are available from the Fermentation Research Institute, Tsukuba, Ibaraki 305, Japan under the provisions of the Budapest Treaty, under deposit No. FERM BP-927. This strain has been redeposited on Apr. 27, 1989 with the Agricultural Research Culture Collection International Depository, Peoria, Ill. 61604, U.S.A. under the provisions of the Budapest Treaty, under deposit No. NRRL 18488. The macrolide **FR-900520** (European Patent Application 0184162), also known as **ascomycin**, may be prepared in accordance to the published methods of (i) H. Hatanaka, M. Iwami, T. Kino, T. Goto and M. Okuhara, **FR-900520** and **FR-900523**, Novel **immunosuppressants** isolated from *A streptomyces*. I. Taxonomy of the producing strain. *J. Antibiot.*, 1988. XLI(11), 1586-1591; (ii) H. Hatanaka, T. Kino, S. Miyata, N. Inamura, A. Kuroda, T. Goto, H. Tanaka and M. Okuhara, **FR-900520** and **FR-900523**, Novel **immunosuppressants** isolated from *A streptomyces*. II. Fermentation, isolation and physico-chemical and biological characteristics. *J. Antibiot.*, 1988. XLI(11), 1592-1601; (iii) T. Arai, Y. Koyama, T. Suenaga and H. Honda, **Ascomycin**, An Antifungal Antibiotic. *J. Antibiot.*, 1962. 15(231-2); and (iv) T. Arai in U.S. Pat. No. 3,244,592. One or more of the processes discussed below may be then employed to produce the desired compound of the invention.

DETD **Ascomycin** (2.5 g, 0.032 mol, Formula I: R.<sub>sub.1</sub>00 .dbd.H; R.<sub>sub.1</sub>01 .dbd.ethyl; R.<sub>sub.1</sub>02 .dbd.H; R.<sub>sub.1</sub>03 .dbd.OH; R.<sub>sub.1</sub>04 .dbd.OH; R.<sub>sub.1</sub>05 .dbd.H) was dissolved in a solution of imidazole (43.03 g, 0.64 mol) in dry N,N-dimethylformamide (500 mL) and tert-butyldimethylchlorosilane (47.64 g, 0.32 mol) was added in portions and stirred at room temperature for 24 hours. N,N-dimethylformamide and excess tert-butyldimethylchlorosilane were removed by distillation (bath 35.degree. C.) under high vaccum. The solid residue was dissolved in 350

mL of ethylacetate, and the ethyl acetate layer was washed with saturated ammonium chloride aq. solution (200 mL.times.3), 10%-NaHSO<sub>4</sub> (200 mL.times.3), brine, saturated NaHCO<sub>3</sub> (200 mL.times.3), and brine (200 mL.times.3). After dried over MgSO<sub>4</sub>, solvent was removed in vacuo and the solid residue was purified by silica gel chromatography, followed by HPLC eluting with 5% acetone in hexanes providing the title compound (27 g) in 84% yield. MS (FAB) m/z: M+K=1058.

DETD In addition to the title compound, unreacted starting material (Example 1, 1.5 g) and **ascomycin** (500 mg) were isolated as a pure form.

DETD Methylsulfide-chlorine complex was prepared by adding oxalyl chloride (0.32 g) into a stirred solution of dimethylsulfoxide (0.44 g) in methylene chloride (4 mL) and stirring at -70.degree. C. for 0.5 hours. The solution of the complex was added in slow dropwise fashion into a stirring solution of **ascomycin** (1.6 g) in methylene chloride (5 mL) at -70.degree. C. After stirring for 0.25 hours, triethylamine (1.4 g) was added at -70.degree. C. Stirring was continued at -70.degree. C. for 0.5 hours and then at room temperature for 1 hour. The reaction mixture was then diluted with ether (100 mL), washed with 1N HCl (aq) (2.times.30 mL), saturated brine (30 mL), dried over magnesium sulfate and solvent removed. The product was purified on silica gel (70 g) with ether elution. Yield: 0.95 g; MS (FAB) m/z: M+H=790.

DETD **Ascomycin** (10 g, 12.6 mmol) and pyridinium p-toluene sulfonate (1 g, 3.98 mmol) were dissolved in 200 mL of toluene and stirred at 70.degree. C. over night. Solvent was removed, and the residue was purified by silica gel column chromatography, eluting with 5-10% acetone in hexane. The title compound (8.89 g) was isolated in 91% yield. MS (FAB) m/z: M+K=812.

DETD Following the procedures of Examples 1-3, but replacing **ascomycin** with the resultant compound of Example 50, the titled compound is obtained.

DETD Following the procedure of Example 9, but replacing **ascomycin** (Formula I: R<sub>1</sub>.sub.100 .dbd.H; R<sub>1</sub>.sub.101 .dbd.ethyl; R<sub>1</sub>.sub.102 .dbd.H; R<sub>1</sub>.sub.103 .dbd.OH; R<sub>1</sub>.sub.104 .dbd.OH; R<sub>1</sub>.sub.105 .dbd.H) with the resultant compound 53 provides the titled compound.

DETD Following the procedure of Example 9, but replacing **ascomycin** (Formula I: R<sub>1</sub>.sub.100 .dbd.H; R<sub>1</sub>.sub.101 .dbd.ethyl; R<sub>1</sub>.sub.102 .dbd.H; R<sub>1</sub>.sub.103 .dbd.OH; R<sub>1</sub>.sub.104 .dbd.OH; R<sub>1</sub>.sub.105 .dbd.H) with FK-523 (Formula I: R<sub>1</sub>.sub.100 .dbd.H; R<sub>1</sub>.sub.101 .dbd.methyl; R<sub>1</sub>.sub.102 .dbd.H; R<sub>1</sub>.sub.103 .dbd.OH; R<sub>1</sub>.sub.104 .dbd.OH; R<sub>1</sub>.sub.105 .dbd.H) provides the titled

DETD The **immunosuppressant** activity of the compounds of the present invention was determined using the human mixed lymphocyte reaction (MLR) assay described by Kino, T. et al. in Transplantation Proceedings XIX(5):36-39, Suppl. 6 (1987), incorporated herein by reference. The results of the assay, shown below in Table 1, demonstrate that the compounds tested are effective immunomodulators at sub-micromolar concentrations.

PI US 5530120 19960625

arbonat.

SUMM The **inorganic salts** may include sodium bicarbonate, **magnesium sulfate** and sodium chloride. In the case of sodium bicarbonate, optimum therapeutic results have been achieved when about 20% of the sodium bicarbonate particles are about 40 microns in diameter and the remaining 80% of particles vary in size down in diameter and the remaining 80% of particles vary in size down to about 1 micron or less in diameter. Such a particle size distribution maximizes cleaning efficiency without causing harmful tooth abrasion.

PI US 4812306

19890314

DETD The core composition is also ideally suited for the manufacture of a clear antiperspirant composition. A particular advantage of the invention is the formulation of a clear, high viscosity antiperspirant cream using the most effective anti-perspirant active available and at the highest concentration allowed by law which is 20% of aluminum zirconium tetrachlorohydrex gly. The invention, however, is not limited to the use of aluminum zirconium tetrachlorohydrex gly since the more economical but slightly less effective aluminum chlorohydrate can be used. Another advantage of the invention is that urea may be added to the aluminum zirconium complex which further reduces, prevents and heals skin irritation in the high viscosity cream. The preferred range of core components when the core is used as the basis for an antiperspirant is also about 20-40% water, 8-20% cetyl dimethicone copolyol, 10-35% cyclomethicone and about 8-25% of one or more salts. The composition may additionally contain one or more of the additional ingredients mentioned previously and in particular **humectants**, solvents, emulsifiers, thickeners or masking agents are desireable. In the anti-perspirant composition the **humectant** may be urea, propylene glycol or both. The salts may be inorganic salts such as one or more of sodium chloride, sodium thiosulfate, alone or in conjunction with antiperspirant actives such as aluminum zirconium tetrachlorohydrex gly or aluminum chlorohydrate. A variety of solvents are desireable particulaly SD-40 alcohol, isopropyl alcohol and other similar alcohols. Preferably the co-emulsifier is methoxy PEG-22 dodecylcopolymer or oleic acid derivatives included therein such as sorbitan oleate or glycyrrhizic acid or its derivatives. A masking agent may be desireable to mask any medicinal odors. Ethylene brassylate, for example, is suitable for this use.

DETD The antiperspirant composition preferably contains a **humectant**. One or more of urea or propylene glycol is suitable and the preferred ranges are 1-20% urea and/or 1-15% propylene glycol. Any of the forementioned antiperspirant actives are suitable either as the salt component along or in conjunction with other organic or inorganic salts. For example, one or more of aluminum zirconium tetrachlorohydrex gly, aluminum chlorohydrate, or magnesium chloride may be used. Optional additives such as co-emulsifiers, thickeners, masking agents, and so on, may be desired. The co-emulsifiers glycyrrhizic acid, Elfacos E 200, sorbitol, or PEG-30 Glyceryl monoacetate were used in the invention along with ethylene brassylate as a masking agent.

DETD In one further preferred embodiment of the invention the core composition is used to make a clear moisturizing sunscreen composition. The sunscreen composition contains the same component ranges of the clear moisturizing composition and additionally contains a **humectant** such as urea and/or propylene glycol and a U.V. absorber. Generally preferred are one or more of the **humectants** urea or propylene glycol in the range of 1-20% and 1-15% respectively. Any one or more of a U.V. absorber of Category I or Category II is suitable, for example 1.4-8% of octyl dimethyl PABA.

CLM What is claimed is:

1. A clear water in oil microemulsion moisturizing cream composition comprising the following essential constituents: (a) 8-20% of an ingredient selected from the group consisting of a mixture having an HLB 4-6 of cetyl dimethicone copolyol, polyglyceryl-3 oleate, and hexyl laurate; a mixture having an HLB 4-6 of cetyl dimethicone copolyol, polyglyceryl-4-isostearate, and hexyl laurate; cetyl dimethicone copolyol of HLB 4-6; and a mixture having an HLB 4-6 of cetyl dimethicone copolyol and hexyl laurate (b) 20-40% water, (c) 10-35% of a silicone selected from the group consisting of a polydimethylsiloxane having molecular weight of about 500-26,000, a polymethyl hydrogen siloxane of molecular weight about 500-23,000, cyclomethicone, phenyl dimethicone, hexamethyldisiloxane, trimethylsiloxy silicate, and stearoxy trimethylsilane, (d) 5-15% of a C.sub.1-6 organic alcohol selected from the group consisting of SD-40 alcohol and isopropyl alcohol, (e) 8-20% by weight of a salt selected from the group consisting of an organic

salt and **inorganic salt** wherein the **inorganic salt** is sodium chloride, **magnesium sulfate**, aluminum zirconium tetrachlorohydrex gly, magnesium chloride, sodium thiosulfate, aluminum chloride, aluminum chlorohydrate, sodium acetate, sodium citrate, sodium phosphate, or calcium chloride or mixtures thereof, and the organic salt is sodium aluminum lactate, sodium butoxyethoxy acetate, sodium caprylate, sodium citrate, sodium lactate, sodium dihydroxyglycinate, sodium gluconate, sodium glutamate, sodium hydroxymethane sulfonate, sodium oxalate, sodium phenate, sodium propionate, sodium saccharidine, sodium salicylate, sodium sarcosinate, sodium tolene sulfonate, magnesium aspartate, calcium propionate, calcium saccharine, calcium-D-saccharate, calcium thioglycolate, aluminum caprylate, aluminum citrate, aluminum diacetate, aluminum glycinate, aluminum lactate, aluminum methionate, aluminum phenosulfonate, potassium aspartate, potassium biphthalate, potassium bitartrate, potassium glycosulfate, potassium sorbate, potassium thioglycolate, potassium toluenesulfonate, potassium troclosene, magnesium lactate, or mixtures thereof, (f) 1-20% of a **humectant** selected from the group consisting of urea and propylene glycol.

2. The composition of claim 1 wherein the **inorganic salt** is sodium chloride, **magnesium sulfate**, aluminum zirconium tetrachlorohydrex gly, magnesium chloride, sodium thiosulfate, aluminum chloride, aluminum chlorohydrate, sodium acetate, sodium citrate, sodium phosphate, or calcium chloride.
3. The composition of claim 1 which is a clear moisturizing cream additionally containing one or more **humectant**.

PI

US 5162378

19921110

L71 ANSWER 7 OF 7 USPATFULL on STN

SUMM For nasal administration, **ascomycins** of the invention will suitably be administered in liquid form from a nasal applicator. Forms suitable for ophthalmic use will include **lotions**, **tinctures**, **gels**, **ointments** and ophthalmic inserts, again as known in the art. For rectal administration. i.e. for **topical** therapy of the colon, **ascomycins** of the invention may be administered in suppository or enema form, in particular in solution, e.g. in vegetable oil or like oily system for use as a retention enema.

SUMM Pharmaceutically acceptable diluents or carriers under C above are diluents or carriers acceptable for **topical** application at the intended site of therapy, e.g. diluents or carriers acceptable for **topical** administration pulmonarily, dermally, nasally, ocularly or rectally. Forms in topically administrable form, e.g. enabling or facilitating **topical** administration, include, e.g. dry powder preparations of the active ingredient (i.e. of the invention) in substantially pure form, for example as employed in the art for delivery from dry powder inhalation device. Means or devices enabling or facilitating **topical** administration include, in particular, inhalation devices as well as containers and the like from which the active ingredients may be delivered in a form capable of **topical** application. Preferred embodiments as defined under C will be (i) such as permit **topical** administration within the airways or lungs, e.g. by inhalation, in the case of **ascomycins** of the invention bearing one or more oxycarbonyl moieties, and (ii) such as to permit **dermal** administration, e.g., in the form of an **ointment** or **cream**, in the case of **ascomycins** of the invention bearing one or more carboxy moieties.

SUMM For **dermal** administration for the treatment of diseases or conditions of the **skin**, **ascomycins** of the invention will generally be administered in appropriate, i.e. dermally applicable, form comprising a therapeutically effective concentration of the **ascomycin** of the invention, e.g. from ca. 0.001 to 10%, e.g. 0.004%-1% by weight of **ascomycin** of the invention, together with a dermally acceptable diluent or carrier therefor. Formulations for **dermal** administration may take the form of **creams**, **ointments**, **gels**, or transdermal delivery systems, e.g. patches and, in addition to inert diluents or carriers, may suitably contain **skin** penetration enhancing agents, analogously to formulations as known in the art. Such compositions will suitably be applied to the site of treatment in an amount of from ca. 0.005 to ca. 0.05 g/cm.sup.2, 1, 2, or 3.times. daily.

ACCESSION NUMBER: 1999:81841 USPATFULL  
TITLE: Ascomycins  
INVENTOR(S): Hersperger, Rene, Munchenstein, Switzerland  
Naef, Reto, Rheinfelden, Switzerland  
PATENT ASSIGNEE(S): Novartis AG, Basel, Switzerland (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5925649		19990720
	WO 9631514		19961010
APPLICATION INFO.:	US 1997-930730		19971002 (8)
	WO 1996-EP1492		19960404
			19971002 PCT 371 date
			19971002 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-7128	19950406

GB 1995-26049 19951220  
GB 1995-26050 19951220  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Raymond, Richard L.  
ASSISTANT EXAMINER: Ngo, Tamthom T.  
LEGAL REPRESENTATIVE: Loeschorn, Carol A.  
NUMBER OF CLAIMS: 15  
EXEMPLARY CLAIM: 1  
LINE COUNT: 827  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L71 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AB An HPLC/MS/MS assay for tacrolimus (FK506) in whole blood using FR900520 as an internal std. was validated over the std. curve range of 0.100-10.040 ng mL-1. The calibration curve for tacrolimus in human blood gave a slope of 0.2481, an intercept of 0.007, and a correlation coeff. (r) of 0.9996, with no interference noted from human blood, analyte, or internal std. stock solns. Use of EDTA or heparin as the preservative in blood resulted in no significant differences. Samples were stable for at least the time required to assay the max. no. of samples that could be placed in the automated system. The limit of sensitivity of the assay was set at the concn. of the lowest nonzero std. tested, i.e., 0.100 ng mL-1. However, validation of the assay to a limit of 0.010 ng mL-1 is currently underway. The within-run and between-run precision and accuracy of the method were detd. for four quality control samples. The highest CV was seen at 0.1 ng mL-1 (17.6% within-run and 15.9% between-run), with other CV < 5%. The recovery ranged 79.6-81.3% for tacrolimus over the range 0.3-8.0 ng mL-1 and was 63.10 .+- . 1.37% for FR900520. There was a linear correlation ( $r^2 = 0.963$ ) between assay results by HPLC/MS/MS and ELISA in whole blood from atopic dermatitis patients treated with **topical tacrolimus ointment**. The difference between the means .+- . S.D. detd. by HPLC/MS/MS (1.22 .+- . 1.46 ng mL-1) and ELISA (1.12 .+- . 1.29 ng mL-1) was significant by a paired t-test ( $P<0.001$ ). Similarly, there was a linear correlation ( $r^2 = 0.841$ ) between assay results by HPLC/MS/MS and IMx in whole blood from solid organ transplant patients treated with tacrolimus. The difference between the means was significantly higher ( $P<0.001$ ) for the IMx (15.80 .+- . 8.37 ng mL-1) than the HPLC/MS/MS (13.42 .+- . 6.87 ng mL-1).

ACCESSION NUMBER: 1997:743570 CAPLUS  
DOCUMENT NUMBER: 128:57027  
TITLE: An HPLC/MS/MS assay for tacrolimus in patient blood samples. Correlation with results of an ELISA assay  
AUTHOR(S): Alak, Ala M.; Moy, Selina; Cook, Melissa; Lizak, Paula; Niggebiugge, Adali; Menard, Shantil; Chilton, Anthony  
CORPORATE SOURCE: Fujisawa Research Institute of America, Northwestern University/Evanston Research Park, Evanston, IL, 60201, USA  
SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1997), 16(1), 7-13  
CODEN: JPBADA; ISSN: 0731-7085  
PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L71 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
IT 104987-11-3, FK506 104987-12-4, **FR900520**  
RL: BIOL (Biological study)  
(**ointment** contg. absorption promoter and, for treatment of skin diseases)  
ACCESSION NUMBER: 1992:241941 CAPLUS  
DOCUMENT NUMBER: 116:241941  
TITLE: Ointments containing tricyclic compounds for treatment of skin diseases  
INVENTOR(S): Asakura, Sotoo; Murakami, Yoshio; Kanagawa, Nobuto; Nakate, Toshiomi  
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 14 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 474126	A1	19920311	EP 1991-114598	19910830
EP 474126	B1	19970319		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AU 9183515	A1	19920312	AU 1991-83515	19910830
AU 656145	B2	19950127		
AT 150304	E	19970415	AT 1991-114598	19910830
ES 2099112	T3	19970516	ES 1991-114598	19910830
HU 59002	A2	19920428	HU 1991-2846	19910903
ZA 9106983	A	19920527	ZA 1991-6983	19910903
RU 2079303	C1	19970520	RU 1991-5001707	19910903
CA 2050623	AA	19920305	CA 1991-2050623	19910904
CA 2050623	C	20020205		
CN 1059468	A	19920318	CN 1991-108796	19910904
CN 1069193	B	20010808		
JP 05017481	A2	19930126	JP 1991-224418	19910904
JP 2526752	B2	19960821		
US 5385907	A	19950131	US 1993-62330	19930517
PRIORITY APPLN. INFO.:				
			JP 1990-235177	A 19900904
			US 1991-750942	B1 19910828
OTHER SOURCE(S): MARPAT 116:241941				

L77 ANSWER 1 OF 30 USPATFULL on STN

CLM What is claimed is:

37. The composition of claim 30, wherein said **humectant** is selected from the group consisting of: glycerin, hydrogenated starch hydrolysate, propylene glycol, sodium PCA, **sodium lactate**, sorbitol, and mixtures thereof.

PI US 2003077962 A1 20030424

=> d 177 1-30 hit, pi, ab

L77 ANSWER 1 OF 30 USPATFULL on STN

CLM What is claimed is:

37. The composition of claim 30, wherein said **humectant** is selected from the group consisting of: glycerin, hydrogenated starch hydrolysate, propylene glycol, sodium PCA, **sodium lactate**, sorbitol, and mixtures thereof.

PI US 2003077962 A1 20030424

AB A skin barrier-enhancing tissue product, such as facial tissue, bath tissue or paper towels and the like, can be made by applying, on the surface(s) of the tissue, a lipid-enriched melted oil based-hydrophobic composition comprising a natural fat or oil, a sterol or sterol derivative, an emulsifying surfactant having an HLB range from about 3 to about 6, a humectant, an emollient, a wax, and a viscosity enhancer, and thereafter resolidifying the composition to form a distribution of solid composition on the surface(s) of the tissue.

L77 ANSWER 2 OF 30 USPATFULL on STN

CLM What is claimed is:

11. The non-woven article of claim 9 further comprising a lotion containing at least one ingredient selected from the group consisting of **sodium chloride** solution, preservatives, boric acid, bicarbonates, moisturizers, **emollients**, surfactants, **humectants**, alcohols, water, and fragrances.

PI US 2003008591 A1 20030109

AB The present invention is directed to a non-woven material having an emulsion binder, which is dispersible in water, yet non-dispersible in aqueous solutions containing 0.5 weight percent or more of an inorganic salt. The water-dispersible polymer comprises from 1 to 100 percent by weight of a hydrophilic monomer and from 0 to 99 percent by weight of at least one non-hydrophilic monomer, wherein a film formed from said polymer has a Tg of from -40 to 105.degree. C. The dispersible non-woven material is useful in forming disposable articles which can be disposed of by flushing down a toilet.

L77 ANSWER 3 OF 30 USPATFULL on STN

CLM What is claimed is:

5. The composition of claim 1, wherein said **humectant** is selected from the group consisting of PEG, glycerin, propylene glycol, sorbitol and **sodium lactate**.

PI US 6310014 B1 20011030

AB Personal and household care compositions that deliver an audible crackling or popping sound during use. The sound is created by the release of pressurized carbon dioxide that has been encapsulated in a water-soluble structure. The carbon dioxide gas is released as the encapsulating material dissolves or when it is ruptured by mechanical action. The popping or crackling sound helps create consumer interest by signaling the presence and continued action of the product.

L77 ANSWER 4 OF 30 USPATFULL on STN

CLM What is claimed is:

34. The method of claim 1, wherein said **humectant** is selected from the group consisting of: glycerin; hydrogenated starch hydrolysate; propylene glycol; sodium PCA; **sodium lactate**; sorbitol; and, mixtures thereof.

37. The method of claim 26, wherein said **humectant** is selected from the group consisting of: glycerin; hydrogenated starch hydrolysate; propylene glycol; sodium PCA; **sodium lactate**; sorbitol; and, mixtures thereof.

PI US 6287581 B1 20010911

AB A superior skin barrier enhancing body facing material, such as a body side liner on an absorbent article, can be made by applying, on the outer surface of the body facing material, a lipid-enriched hydrophobic composition comprising a natural fat or oil, a sterol or sterol derivative, an emulsifying surfactant, a humectant, an emollient, a wax, and a viscosity enhancer, and thereafter resolidifying the composition to form a distribution of solid composition on the outer surface of the body facing material.

L77 ANSWER 5 OF 30 USPATFULL on STN

CLM What is claimed is:

40. The composition of claim 32, wherein said **humectant** is selected from the group consisting of: glycerin, hydrogenated starch hydrolysate, propylene glycol, sodium PCA, **sodium lactate**, sorbitol, and mixtures thereof.

PI US 2001014350 A1 20010816

US 6534074 B2 20030318

AB A superior skin barrier enhancing body facing material, such as a body side liner on an absorbent article, can be made by applying, on the outer surface of the body facing material, a lipid-enriched hydrophobic composition comprising a natural fat or oil, a sterol or sterol derivative, an emulsifying surfactant, a humectant, an emollient, a wax, and a viscosity enhancer, and thereafter resolidifying the composition to form a distribution of solid composition on the outer surface of the body facing material.

L77 ANSWER 6 OF 30 USPATFULL on STN

CLM What is claimed is:

1. Process for disinfecting a skin surface or mucous surface, which comprises applying to the surface an effective amount of a disinfecting composition which contains at least an optical brightener and optionally a **humectant** selected from the group consisting of sorbitol solution, 1-2 propylene glycol, PEG derivatives and **sodium lactate**, provided that said composition does not contain any fluoroaliphatic surfactant nor reducing agent selected from the class of hydrazine and hydroxylamine and alkali metal salts of oxygen acids of divalent sulfur and tetravalent sulfur.

11. A disinfecting composition for disinfecting a skin surface or mucous surface, which comprises at least 0.0001% to 3.0% by weight of an optical brightener and optionally a **humectant** selected from the group consisting of sorbitol solution, 1-2 propylene glycol, PEG derivatives and **sodium lactate**, provided that said composition does not contain any fluoroaliphatic surfactant nor reduction agent selected from the class of hydrazine and hydroxylamine and alkali metal salts of oxygen acids of divalent sulfur and tetravalent sulfur.

PI US 6258370 B1 20010710

WO 9820094 19980514

AB A process and compositions for disinfecting the skin, hands and mucous membrane. The compositions contain an optical brightener and exhibit intense fluorescence in the visible wavelength range on exposure to UV light and thus permit simple monitoring of the treated skin or mucous membrane surfaces for ensuring complete disinfection, but without exhibiting the disadvantages associated with the use of conventional dyes, such as discoloration of the skin and articles.

L77 ANSWER 7 OF 30 USPATFULL on STN

CLM What is claimed is:

15. The method of claim 10, wherein the antioxidant includes butylated hydroxytoluene, the buffer includes Hepes, the isotonic reagent includes **sodium chloride**, the amino acid chelating agent includes serine, and the **humectant** includes sorbitol and glycerol; and the carrier protein includes bovine serum albumin.

PI US 6183979 B1 20010206

AB A method for preparation of an air-dried prothrombin time (PT) reagent which uses a recombinant protein and synthetic phospholipids is described. The source for the recombinant protein is rabbit brain, and the phospholipids employed are palmitoyloleoylphosphatidylcholine (POPC) and palmitoyloleoylphosphatidylserine (POPS). The particular formulation buffer used to dilute the lipidated tissue factor provides a reagent that is dried without lyophilization and remains stable for at least 2 weeks at 37 C. A method for preparing the improved PT reagent and a method of using the reagent to analyze blood PT is also provided.

L77 ANSWER 8 OF 30 USPATFULL on STN

CLM What is claimed is:

1. A cold, low fat peanut butter product comprising water and a **humectant** selected from the group consisting of glycerin, propylene glycol, sorbitol, **sodium lactate** and combinations thereof and having a water activity level of less than 0.80.

8. A low fat peanut butter composition, comprising water, a peanut component; and a **humectant** selected from the group consisting of glycerin, propylene glycol, sorbitol, **sodium lactate** and combinations therein in an amount sufficient to reduce the water activity to less than 0.80, said component consisting of defatted peanut flour.

12. The method of claim 11 wherein said **humectant** is selected from the group consisting of glycerin, propylene glycol, sorbitol, **sodium lactate** and combinations thereof.

PI US 6153249 20001128

AB A low fat peanut butter product having a water activity level of less than 0.80, which can be obtained without heating. A humectant can be used in an amount sufficient to provide a predetermined water activity level. Shelf stability is thereby obtained without discoloration or the formation of off flavors.

L77 ANSWER 9 OF 30 USPATFULL on STN

CLM What is claimed is:

1. A care kit for facilitating reduced irritation associated with wearing contact lenses, the kit comprising: at least one solution for the care of contact lenses; at least one non-irritating solution for cleansing eyelids; instructions for informing contact lens wearers of the proper care of contact lenses in conjunction with eyelid hygiene for improved comfort while wearing contact lenses; and housing for securing the solution for the care of contact lenses, the solution for cleansing eyelids and the instructions wherein the non-irritating solution for cleansing eyelids comprises an anionic surfactant, a non-ionic thickener

and **emollient**, an amphoteric surfactant, a polyoxyethylenesorbitan fatty acid ester, lauroamphocarboxy glycinate, sodium laureth-13 carboxylate, PEG15 tallow polyamine, **sodium chloride**, and at least one microbiological preservative.

5. A method of caring for eyes and eyelids using a care kit for contact lens wearers comprising at least one contact lens solution, at least one eyelid cleanser and instructions for use of both the contact lens solution and eyelid cleanser for improved comfort of wearer, the solution, the cleanser and the instructions secured in a housing; the method comprising: using eyelid cleanser according to instructions for the removal and insertion of contact lenses; and applying contact lens solutions according to instructions for the removal and insertion of contact lenses wherein the eyelid cleanser comprises an anionic surfactant, a non-ionic thickener and **emollient**, an amphoteric surfactant, a polyoxyethylenesorbitan fatty acid ester, lauroamphocarboxy glycinate, sodium laureth-13 carboxylate, PEG-15 tallow polyamine, **sodium chloride**, and at least one microbiological preservative.

PI US 6112900 20000905  
AB A care kit for reducing irritation and other ocular problems associated with wearing contact lenses is disclosed. The care kit includes at least one solution for the care of contact lenses; at least one non-irritating solution for cleansing eyelids; instructions for informing contact lens wearers of the proper care of contacts in conjunction with eyelid hygiene for improved comfort while wearing contact lenses; and housing for securing the solution for the care of contact lenses, the solution for cleansing eyelids and the instructions. Preferably, the solution for the care of contact lenses can be selected from a group comprising contact lens cleansing solution, disinfecting solution, soaking solution, wetting solution, storage solution, rinsing solution or a combination thereof. The eyelid cleanser can be soaked into a disposable pad and wrapped within an impervious wrapper. Alternatively, the eyelid cleanser is enclosed within an impervious bottle. Instructions to explain the use of contact lens solutions in conjunction with the eyelid cleanser for improved comfort while wearing lenses are included with the kit. In the method of this invention, the eyelid cleanser and contact lens solutions are applied according to the instructions provided.

L77 ANSWER 10 OF 30 USPATFULL on STN  
CLM What is claimed is:  
11. An oil-in-water emulsified composition according to claim 9, wherein said **humectant** is one or more selected from the group consisting of glycerin, fructose, trimethylglycine, **sodium lactate**, and sodium pyrrolidone carboxylate.

PI US 6074652 20000613  
AB An oil-in-water emulsified composition comprising an a .alpha.-monoalkyl glyceryl ether, a wax, and a silicone oil: wherein the amount of the silicone oil is not less than 10 wt % with respect to an oil phase except the a .alpha.-monoalkyl glyceryl ether and the wax, this composition displays excellent emulsion stability and feeling of use.

L77 ANSWER 11 OF 30 USPATFULL on STN  
CLM What is claimed is:  
2. A process according to claim 1 wherein the **humectant** that is incorporated in the dough is **sodium chloride**, glycerol or sorbitol or a mixture of two or more of said **humectants**.

PI US 6017573 20000125  
AB A process of preparing an intermediate moisture pasta product having a moisture content of from 15 to 28% by preparing a dough containing an

amount of a humectant to obtain a maximum water activity of 0.89 and an amount of alkali to increase the pH to about 11.5, sheeting or extruding the dough to give a fresh dough product, steaming the fresh dough product, and partially drying to a moisture content of from 15 to 28%.

L77 ANSWER 12 OF 30 USPATFULL on STN

CLM What is claimed is:

10. A process according to claim 9 wherein the **humectant** is salt, glycerol, sorbitol or any mixture of two or more **humectants** containing **sodium chloride**.

PI US 6001405 19991214

AB A process for the production of a pre-cooked, high moisture, shelf-stable or refrigerated, acidified filled pasta comprising a filling within a dough skin which comprises mixing pasta ingredients together to form a pasta dough, forming the dough into a sheet suitable to form the skin of the filled pasta, encasing a filling having a water activity of less than 0.93 and a pH of above 4.6 within the dough sheet to give a raw filled pasta, cooking the raw filled pasta in acidified water to a pH of above 4.6 to a moisture content of from 55 to 70% by weight, partially drying to achieve a moisture content of from 40 to 55% and a water activity of less than 0.93, and finally packaging the cooked pasta either with heat processing or under modified atmospheric conditions.

L77 ANSWER 13 OF 30 USPATFULL on STN

CLM What is claimed is:

9. A process according to claim 1 wherein the solid **humectant** is **sodium chloride**.

PI US 5958488 19990928

AB A process of preparing a shelf stable pasta having a moisture content of from about 15 to about 35% which comprises preparing a fresh pasta, steaming the fresh pasta, partially drying to a moisture content of from about 15 to about 35%, coating the partially dried pasta with a solid humectant in particulate form before or after placing in a package, and packaging the pasta in a container optionally under modified atmospheric conditions.

L77 ANSWER 14 OF 30 USPATFULL on STN

CLM What is claimed is:

4. An oil-water mixed composition according to claim 1, wherein said **humectant** is selected from the group consisting of polyethylene glycol, sorbitol, maltitol, hyaluronic acid, chondroitin sulfate, erythritol, trimethyl glycin, **sodium lactate**, and pyrrolidonecarboxylic acid.

PI US 5919398 19990706

WO 9629975 19961003

AB An oil-water mixed composition is consisted of a solid or semisolid oil phase at room temperature, and a water phase which is dispersed into the oil phase. The water phase contains a humectant and is solid or semisolid at room temperature. Preferably, the oil phase contains hydrophobic silica, dextrin fatty acid ester or polyvalent alcohol oligo ester of long chain monocarboxylic acid and long chain dicarboxylic acid. The oil-water mixed composition is superior in stability with passage of time and safety. In addition, this composition has demonstrated little stickiness and sensation of unsuitability for skin, and has much emollient effect (i.e., to prevent the skin from dryness) and is persistent in preserving its emollient effect.

L77 ANSWER 15 OF 30 USPATFULL on STN

CLM What is claimed is:

1. A method of treating skin comprising: rubbing onto the skin a body

polisher lotion comprising a mixture of **sodium chloride** salt and oil **emollient**, the salt being a gritty solid component in suspension in the oil **emollient** so that the lotion is a two phase lotion which feels gritty to the touch and which exfoliates and moisturizes the skin when the lotion is rubbed onto the skin; continuing the rubbing until the skin is exfoliated to allow the oil **emollient** to penetrate into the skin; and after the step of continuing, at least partly rinsing the body polisher lotion off the skin with water.

PI US 5866145 19990202  
AB A body polisher and method of using the body polisher as a skin treatment, includes a two phase composition containing Dead Sea salt and **emollient**. The **emollient** is advantageously silicone oil and is present in about 32.67% by weight. About 66.66% by weight Sea salt is provided, the remainder being fragrance.

L77 ANSWER 16 OF 30 USPATFULL on STN  
CLM What is claimed is:  
30. The smokable device of claim 23, wherein the dry **humectant** is selected from the group consisting of glycerol, sorbitol, propylene glycol, **sodium lactate**, calcium chloride, potassium phosphate, sodium pyrophosphate, sodium polyphosphate, calcium citrate, calcium gluconate, potassium citrate, potassium gluconate, sodium tartrate, sodium potassium tartrate, and sodium glutamate.  
46. The filter of claim 39, wherein the dry **humectant** is selected from the group consisting of glycerol, sorbitol, propylene glycol, **sodium lactate**, calcium chloride, potassium phosphate, sodium pyrophosphate, sodium polyphosphate, calcium citrate, calcium gluconate, potassium citrate, potassium gluconate, sodium tartrate, sodium potassium tartrate, and sodium glutamate.  
65. The method of claim 63, wherein the dry **humectant** is selected from the group consisting of glycerol, sorbitol, propylene glycol, **sodium lactate**, calcium chloride, potassium phosphate, sodium pyrophosphate, sodium polyphosphate, calcium citrate, calcium gluconate, potassium citrate, potassium gluconate, sodium tartrate, sodium potassium tartrate, and sodium glutamate.

PI US 5860428 19990119  
AB A cigarette filter comprises a humectant, preferably sodium pyroglutamate, and optionally a surfactant. The humectant absorbs moisture from the tobacco smoke for wet-filtration of the tobacco smoke.

L77 ANSWER 17 OF 30 USPATFULL on STN  
CLM What is claimed is:  
7. The composition of claim 1 wherein the **humectant** is selected from the group consisting of sorbitol, molasses, potassium lactate, **sodium lactate**, glycerol, potassium acetate and sodium acetate.  
12. A liquid concentrate solution composition as in claim 11, wherein said organic **humectant** is selected from the group consisting of glycerol, sorbitol, molasses, potassium lactate, **sodium lactate**, potassium acetate and sodium acetate.  
17. A liquid concentrate solution composition for improving plant root watering consisting essentially of (a) from 25 to 75 parts by volume of an organic **humectant** selected from the group consisting of glycerol, sorbitol, molasses, potassium lactate, **sodium lactate**, potassium acetate and sodium acetate, (b) from 0.2 to 1.5 parts by volume of a sodium carboxymethyl cellulose or a cellulose ether adhesive thickener, (c) from 0.2 to 5 parts by volume of a binder

selected from the group consisting of (1) a water soluble polysaccharide, (2) a hygroscopic adhesive binder consisting of a wheaten or potato dextrin, and (3) a calcium, sodium or ammonia salt of lignosulfonic acid, (d) from 0.2 to 2.0 parts by volume of a wetting agent, and (e) from 75 to 25 parts by volume of water based on the total composition.

18. A liquid concentrate solution composition for improving plant root watering consisting essentially of from 25 to 75 parts by volume of an organic **humectant** selected from the group consisting of glycerol, sorbitol, molasses, potassium lactate, **sodium lactate**, potassium acetate, sodium acetate, and blends of glycerol and/or sorbitol with the sodium or potassium salt of alpha-hydroxypropionic acid, from 0.2 to 1.5 parts by volume of a thickener selected from the group consisting of sodium carboxymethyl cellulose and a cellulose ether adhesive thickener, from 0.2 to 5 parts by volume of a binder selected from the group consisting of (1) a water soluble polysaccharide, (2) a hygroscopic adhesive binder consisting of a wheaten or potato dextrin, and (3) a calcium, sodium or ammonia salt of lignosulfonic acid, from 0.2 to 2.0 parts by volume of a wetting agent selected from the group consisting of a nonyl phenol (9-15 mole) ethoxylate and calcium lignosulfonate, and from 75 to 25 parts by volume of water.

PI US 5814123 19980929  
AB Improved solutions for watering plant roots and methods of application, the solutions containing in parts by volume (1) humectant from 25 to 75, (2) thickener from 0.2 to 1.5, (3) binder from 0.2 to 5, (4) wetting agent from 0.2 to 2.0 and (5) water 75 to 25.

L77 ANSWER 18 OF 30 USPATFULL on STN

CLM What is claimed is:

7. The method of claim 6 wherein the **humectant** is selected from the group consisting of **sodium chloride**, propylene glycol and glycerol.

8. The method of claim 6 wherein the **humectant** is an aqueous solution of **sodium chloride** which comprises from about 10 to about 20 percent **sodium chloride** by weight.

10. The method of claim 9 wherein the **humectant** is selected from the group consisting of **sodium chloride**, propylene glycol and glycerol, and the acidulant is selected from the group consisting of citric acid, lactic acid, fumaric acid, tartaric acid, malic acid and glucono delta lactone.

PI US 5695801 19971209  
AB A shelf-stable, uncooked or partially cooked moist pasta is produced by treating freshly extruded or sheeted pasta with steam to set the pasta surface, immersing the steam treated pasta in an aqueous solution containing acidulants and/or humectants, partially drying to remove surface moisture, sealing the pasta in a container, and thermally pasteurizing the pasta while it is in the container using conventional thermal processes or microwave treatment. The pasta thus produced is shelf-stable under non-refrigerated conditions and has an equivalent or better texture, color and flavor than commercially available, fresh refrigerated pastas.

L77 ANSWER 19 OF 30 USPATFULL on STN

CLM What is claimed is:

3. The shaving system of claim 2 wherein the **humectant** is selected from the group consisting of ethylene glycol, glycerine, propylene glycol, dipropylene glycol, triethylene glycol,

1,3-propanediol, butylene glycol, sorbitol, sodium pyroglutamate, N-acetylethanolamine, **sodium lactate**, isopropanol, polyalkylene glycols of the formula ##STR2## wherein R is H or CH<sub>2</sub> and n has an average value of about 2 to about 10, and polyethylene glycol glyceryl ethers.

PI US 5665340 19970909  
AB The present invention relates to a method of improving shaving comfort by softening the hair to be shaved so as to reduce the cutting force required to cut it. The novel method comprises carrying out the following sequential steps:

- (a) contacting an area of hair to be shaved with a reducing agent that breaks disulfide linkages in hair;
- (b) contacting the area of hair treated in step (a) with a humectant and allowing it to dry or partially dry;
- (c) contacting the area treated in step (b) with water to hydrate the hair; and
- (d) shaving the hydrated hair of step (c).

L77 ANSWER 20 OF 30 USPATFULL on STN

CLM What is claimed is:

10. The method of claim 9 wherein the **humectant** is selected from the group consisting of ethylene glycol, glycerine, propylene glycol, dipropylene glycol, triethylene glycol, 1,3-propanediol, butylene glycol, sorbitol, sodium pyroglutamate, N-acetylethanolamine, **sodium lactate**, isopropanol, polyalkylene glycols of the formula ##STR2## wherein R is H or CH<sub>2</sub> and n has an average value of about 2 to about 10, and polyethylene glycol glyceryl ethers.

PI US 5500210 19960319

AB The present invention relates to a method of improving shaving comfort by softening the hair to be shaved so as to reduce the cutting force required to cut it. The novel method comprises carrying out the following sequential steps:

- (a) contacting an area of hair to be shaved with a reducing agent that breaks disulfide linkages in hair;
- (b) contacting the area of hair treated in step (a) with a humectant and allowing it to dry or partially dry;
- (c) contacting the area treated in step (b) with water to hydrate the hair; and
- (d) shaving the hydrated hair of step (c).

L77 ANSWER 21 OF 30 USPATFULL on STN

CLM What is claimed is:

10. The composition of claim 9 further comprising a **humectant** selected from the group consisting of **sodium lactate**, sorbitol, glycerine and a combination of said **humectants**.

23. The method of claim 22 wherein a **humectant** selected from the group consisting of **sodium lactate**, sorbitol, glycerine and a combination of said **humectants** is added to the concentrate.

PI US 5225095 19930706

AB An improved foamable protein hydrolysate based concentrate is provided containing multivalent cations and a water soluble polymer, which

remains stable in storage for at least six months and which, when diluted with 10 to 50 parts of water and mixed with air to generate a foam, produces a foam which lasts essentially unchanged for at least three days.

L77 ANSWER 22 OF 30 USPATFULL on STN

CLM What is claimed is:

5. A hygroscopic laminate as set forth in claim 1, wherein the **humectant** is selected from **sodium lactate** and sodium pyrrolidonecarboxylate.

PI US 5143773 19920901

AB A hygroscopic laminate comprises a hygroscopic layer comprising a gas permeable film, and a water-absorbing polymer and at least one humectant selected from the group consisting of acetic acid, propionic acid, glycolic acid, lactic acid, hydracrylic acid, pyruvic acid and pyrrolidonecarboxylic acid and sodium, potassium, calcium and magnesium salts of these acids, which are wrapped in the gas permeable film; a porous non-water retention sheet; and a water impermeable sheet, the porous non-water retention sheet being disposed on one side of the hygroscopic layer and the water impermeable sheet being disposed on the other side of the hygroscopic layer, to thereby sandwich the hygroscopic layer. The hygroscopic laminate controls the relative humidity in a packaged system to 20 to 40%.

L77 ANSWER 23 OF 30 USPATFULL on STN

CLM What is claimed is:

8. A skin care composition according to claim 1 wherein the **humectants** include **pyrrolidone carboxylic acid, sodium salt sodium chloride, glycerin and urea.**

PI US 5002760 19910326

AB A skin care composition to prevent premature photoaging of the skin of the user includes in addition to basic ingredients, in combination, retinol, a UV absorber and a moisturizer.

L77 ANSWER 24 OF 30 USPATFULL on STN

CLM What is claimed is:

5. The intermediate moisture stable food composition according to claim 4, wherein the **humectant** is selected from the group consisting of **sodium chloride, sugars, polyhydric alcohols, hydrolyzed wheys and mixtures thereof.**

PI US 4990356 19910205

AB An intermediate moisture food composition including

(a) a source of protein in an amount effective to provide a minimum protein content approximately 15% by weight including hash and/or bone-in fractions

(b) at least one humectant in an amount effective to provide maximum water activity of approximately 0.9.

L77 ANSWER 25 OF 30 USPATFULL on STN

CLM What is claimed is:

5. The intermediate moisture stable food composition according to claim 4 wherein the **humectant** is selected from the group consisting of **sodium chloride, sugars, polyhydric alcohols, hydrolyzed wheys and mixtures thereof.**

PI US 4886679 19891212

AB An intermediate moisture food composition including

(a) a source of protein in an amount effective to provide a minimum

protein content approximately 15% by weight including hash and/or bone-in fractions

(b) at least one humectant in an amount effective to provide maximum water activity of approximately 0.9.

L77 ANSWER 26 OF 30 USPATFULL on STN

CLM What is claimed is:

13. A concentrate in tablet or powder form which when mixed with water provides a non-toxic solution for gold plating metallic items such as silver, copper, nickel, brass or gold alloys, or silver plated or gold plated metallic items, said tablet or powder comprising effective amounts of: (1) a water soluble gold salt as a gold generating compound selected from the group consisting of potassium tetrachloroaurate, potassium tetrabromoaurate, potassium tetraiodoaurate, sodium tetrachloroaurate, sodium tetrabromoaurate, sodium tetraiodoaurate and sodium thiosulfatoaurate; (2) a reducing compound for said gold generating compound which is selected from the group consisting of potassium sodium tartrate, potassium hydrogen tartrate and tartaric acid; (3) a polyoxyalkylene ester surfactant; (4) a **humectant** selected from the group consisting of diethylene glycol, dipropylene glycol and triethylene glycol; and (5) a salt as a dilutent and binder which is selected from the group consisting of **sodium chloride**, potassium chloride, sodium bromide, potassium bromide, sodium iodide and potassium iodide.

14. The concentrate of claim 13 wherein the water soluble gold salt is potassium tetrachloroaurate, the reducing compound is potassium sodium tartrate, the polyoxyalkylene ester surfactant is the addition product of 20 moles of ethylene oxide with sorbitan oleate, the **humectant** is dipropylene glycol and the salt is **sodium chloride**.

PI US 4832743 19890523

AB Non-toxic, non-electrolytic solutions, creams and immersion baths are provided for gold plating metallic items such as silver, copper, nickel, brass and gold alloys, as well as silver plated or gold plated items. Water soluble gold salts are used, together with reducing compounds. For convenience, the gold plating ingredients may be combined with salts to form tablets or powders. Addition of water to the tablets or powder provides the novel solutions and immersion baths. The amount of gold generating compound in the solutions and creams is selected to either replenish or maintain the amount of gold on an item which already has a gold surface.

L77 ANSWER 27 OF 30 USPATFULL on STN

CLM What is claimed is:

7. A translucent water-in-oil emulsion according to claims 1 or 3 wherein the **humectant** is selected from the group consisting of glycerine, sorbitol, polyethylene glycol, propylene glycol, polysaccharides, corn syrup, sodium pyrrolidone carboxylic acid, **sodium lactate** and derivatives, monosodium glutamate, polyols, urea and derivatives and natural honey.

PI US 4690774 19870901

AB This invention relates to novel water in oil emulsions. The emulsions of this invention are translucent water in oil emulsions comprising a water phase containing a humectant, an oil phase comprising petroleum jelly and the like and an emulsifying agent to give a water in oil emulsion; the aqueous phase having a refractive index in essentially the same range as the oil phase.

The translucent water in oil of this invention have the same general appearance and feel of petroleum jelly and function like petroleum jelly

but are superior thereto in the sense that when applied to skin will not only help prevent water from escaping therefrom or exist a barrier effect, but also, will allow water humectants and other moisturizers from the emulsion water phase to pass therethrough to contact the skin and to moisturize the skin.

The compositions of this invention are useful as skin moisturizer compositions. They may be used as a carrier or vehicle for oil and water soluble tropical drugs. They also may be used in the same general way as petrolatum (e.g. skin protectant agent, emollient, lubricant, etc.).

L77 ANSWER 28 OF 30 USPATFULL on STN

CLM What is claimed is:

12. An oral composition according to claim 11, wherein said at least one other oral composition ingredient is selected from the group consisting of another surface-active agent, a polishing agent, a **humectant**, a binder, a sweetner, a flavoring agent, a fluorine compound, a bactericide, an inorganic phosphate, an organic phosphate, an enzyme, an antiinflammatory agent, **sodium chloride** and a solvent.

PI US 4279888 19810721

AB An oral composition contains as a surface-active agent 0.1 to 5% by weight of a fatty acid ester of a sugar alcohol selected from the group consisting of lactitol, maltitol, maltotriitol, maltotetraitol, maltopentaitol, maltohexaitol, maltoheptaitol and mixtures thereof. The ester has an acyl group with 8 to 20 carbon atoms such as lauroyl. The oral composition which may be applicable as toothpaste, toothpowder, mouthwashes and the like has a pleasant taste as well as a good foaming power.

L77 ANSWER 29 OF 30 USPATFULL on STN

CLM What is claimed is:

4. The composition of claim 3 wherein the solar filter is an oxyethylenated paraaminobenzoic acid and the **humectant** is **sodium lactate**.

8. The composition of claim 3 wherein the solar filter is triethanolamine salicylate and the **humectant** is **sodium lactate**.

PI US 4217344 19800812

AB The present invention relates to a process for producing a dispersion of spheres comprising arranged molecular layers encapsulating an aqueous phase. The process comprises admixing a water-dispersible lipid component with the aqueous phase to be encapsulated, the liphophile/hydrophile ratio of the lipid component being such that the lipid swells in the said aqueous phase so as to form a lamellar phase. The lamellar phase is agitated and there is added thereto a dispersion liquid in an amount greater than the resulting lamellar phase and the resulting mixture is vigorously agitated for a period of time ranging from 15 minutes to 3-4 hours. The spheres can encapsulate a water-soluble pharmaceutical, a cosmetic or a food and the dispersions containing said encapsulated materials can be used particularly in the pharmaceutical and cosmetic fields.

L77 ANSWER 30 OF 30 USPATFULL on STN

CLM What is claimed is:

10. A composition as defined in claim 1, wherein the humectant is a nonionic humectant selected from the group consisting of sorbitol **humectants**, glycerol and urea, and there is present as an electrolyte at least 0.01 parts by weight of an electrolyte selected from the group consisting of **sodium chloride** and **calcium chloride**.

PI US 3898166 19750805  
AB An antistatic composition particularly adapted for use on textiles, floor coverings, and related materials, comprising an aqueous liquid fluid medium, having a pH within the range of about 7 to 13 and containing as active ingredient an organic antistatic textile agent and from about 1 to 0.5 parts by weight of a humectant. The humectant may be either a nonionic humectant (such as glycerine) or an ionic humectant (including strong electrolytes such as calcium chloride). When the humectant is nonionic, there must also be present at least 0.01 part by weight of a strong electrolyte, i.e., the salt of a strong base and a strong acid.

L86 ANSWER 5 OF 5 USPATFULL on STN

SUMM The novel translucent water-in-oil compositions are particularly useful as skin moisturizer compositions in the treatment of dry skin. Also contemplated are their use in wound healing **ointments**. The translucent water-in-oil emulsions of this invention also may be used in the same general way as petroleum jelly i.e. (1) dermatological uses as a skin emollient and lubricant to provide a soothing, softening and protective layer, and (2) long lasting lubricant for reducing friction between different types of surfaces, including metal and most plastic materials. The compositions of this invention are in medical compositions useful as carriers or vehicles for both oil soluble and water soluble drugs and like medicinal agents.

CLM What is claimed is:

7. A translucent water-in-oil emulsion according to claims 1 or 3 wherein the **humectant** is selected from the group consisting of glycerine, sorbitol, polyethylene glycol, propylene glycol, polysaccharides, corn syrup, sodium pyrrolidone carboxylic acid, **sodium lactate** and derivatives, monosodium glutamate, polyols, urea and derivatives and natural honey.

ACCESSION NUMBER: 87:61858 USPATFULL  
TITLE: Novel translucent water in oil emulsions  
INVENTOR(S): Vishnupad, Mohan, Monroe, CT, United States  
Ramirez, Jose E., Trumbull, CT, United States  
PATENT ASSIGNEE(S): Chesebrough Pond's Inc., Greenwich, CT, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION: US 4690774 19870901

APPLICATION INFO.: US 1985-774727 19850911 (6)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Lovering, Richard D.

LEGAL REPRESENTATIVE: Morgan & Finnegan

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1

LINE COUNT: 293

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L86 ANSWER 4 OF 5 USPATFULL on STN

CLM What is claimed is:

4. A skin care composition according to claim 1 in the form of a skin cream, face cream, lotion, **ointment** or gel.

8. A skin care composition according to claim 1 wherein the **humectants** include pyrrolidone carboxylic acid, sodium salt **sodium chloride**, glycerin and urea.

ACCESSION NUMBER: 91:24471 USPATFULL

TITLE: Retinol skin care composition

INVENTOR(S): Katzev, Phillip K., 891 Jamestown Rd., East Windsor, NJ, United States 08520

	NUMBER	KIND	DATE
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PATENT INFORMATION: US 5002760 19910326

APPLICATION INFO.: US 1989-415709 19891002 (7)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Ore, D. R.

LEGAL REPRESENTATIVE: Sachs & Sachs

NUMBER OF CLAIMS: 12

EXEMPLARY CLAIM: 1

LINE COUNT: 198

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L86 ANSWER 3 OF 5 USPATFULL on STN

SUMM Some cosmetics and drugs have a formulation of an oil-in-water or a water-in-oil emulsion mainly composed of a water phase and an oil phase component such as milky lotion, cream or ointment.

CLM What is claimed is:

4. An oil-water mixed composition according to claim 1, wherein said humectant is selected from the group consisting of polyethylene glycol, sorbitol, maltitol, hyaluronic acid, chondroitin sulfate, erythritol, trimethyl glycin, sodium lactate, and pyrrolidonecarboxylic acid.

ACCESSION NUMBER: 1999:75256 USPATFULL  
TITLE: Oil-water mixed composition  
INVENTOR(S): Nakamura, Fumiaki, Yokohama, Japan  
Abe, Koji, Yokohama, Japan  
Ito, Kenzo, Yokohama, Japan  
PATENT ASSIGNEE(S): Shiseido Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5919398		19990706
	WO 9629975		19961003
APPLICATION INFO.:	US 1997-750015		19970416 (8)
	WO 1996-JP842		19960310
			19970416 PCT 371 date
			19970416 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1995-100548	19950331
	JP 1995-100549	19950331
	JP 1995-152404	19950526
	JP 1995-152405	19950526

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Lovering, Richard D.  
LEGAL REPRESENTATIVE: Snider, Ronald R.  
NUMBER OF CLAIMS: 27  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1202  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Entries identify the native amino acid by single letter code and sequence position, followed by the replacement amino acid in the mutant. Thus, F36V Designates a human FKBP12 sequence in which phenylalanine at position 36 is replaced by valine. F36V/F99A indicates a double mutation in which phenylalanine at positions 36 and 99 are replaced by valine and alanine, respectively.

F36A	Y26V	F46A	W59A
F36V	Y26S	F48H	H87W
F36M	D37A	F48L	H87R
F36S	I90A	F48A	F36V/F99A
F99A	I91A	E54A/F36V/F99G	F99G
F46H	E54K/F36M/F99A	Y26A	F46L
V55A	F36M/F99G		

DETD [0147] Illustrative examples of ligand binding domain/ligand pairs include **retinol** binding protein or variants thereof and **retinol** or derivatives thereof; cyclophilin or variants thereof and cyclosporin or analogs thereof; FKBP or variants thereof and FK506, **FK520**, rapamycin, analogs thereof or synthetic FKBP ligands. In the case of a ligand binding domain comprising or derived from an immunophilin or cyclophilin, the complex of the ligand with the ligand binding domain will desirably not bind specifically to calcineurin or FRAP. A wide variety of FK506 derivatives and synthetic FKBP ligands are known which do not have observable immunosuppressive activity. Likewise, a variety of rapamycin analogs are known which bind to FKBP but are not immunosuppressive. See e.g. WO 98/02441 for non-immunosuppressive rapalogs. Those and other ligands can be used as well, depending on the choice of CAD.

DETD [0148] Ligand binding domain/ligand pairs are illustrated by FKBP domains, e.g. F36M FKBP, and FKBP ligands. In general, it is preferred that the ligand bind preferentially to a mutated (i.e., having a peptide sequence not naturally occurring in the cells to be engineered) FKBP relative to wild-type FKBP. Ligands for FKBP proteins, including F36M FKBP, can comprise or be derived from a naturally occurring FKBP ligand such as rapamycin; FK506 or **FK520**, or a synthetic FKBP ligand, e.g. as disclosed in PCT/US95/10559; Holt, et al., J. Amer. Chem. Soc., 1993, 715, 9925-9938; Holt, et al., Biomed. Chem. Lett., 1993, 4, 315-320; Luengo, et al., Biomed. Chem. Lett., 1993, 4, 321-324; Yamashita, et al., Biomed. Chem. Lett., 1993, 4, 325-328; PCT/US94/01617; PCT/US94/08008. See also EP 0 455 427 A1; EP 0 465 426 A1; U.S. Pat. No. 5,023,26; WO 92/00278; WO 94/18317; WO 97/31898; WO 96/41865; and Van Duyne et al (1991) Science 252, 839.

CLM What is claimed is:

6. The method of claim 5 wherein the ligand binding domain binds a ligand that is or is derived from FK506, **FK520**, rapamycin or cyclosporin A.

17. The method of claim 16 wherein the conditional aggregation domain binds a ligand that is or is derived from FK506, **FK520**, rapamycin or cyclosporin A.

ACCESSION NUMBER: 2002:92274 USPATFULL  
TITLE: Methods and materials for regulated production of proteins  
INVENTOR(S): Natesan, Sridaran, Chestnut Hill, MA, UNITED STATES  
Clackson, Timothy P., Cambridge, MA, UNITED STATES  
Pollock, Roy M., Medford, MA, UNITED STATES  
PATENT ASSIGNEE(S): ARIAD Gene Therapeutics, Inc. (U.S. corporation)

NUMBER	KIND	DATE
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US 2002048792	A1	20020425

PATENT INFORMATION: US 2002048792 A1 20020425

APPLICATION INFO.: US 2001-906189 A1 20010716 (9)  
RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-488267, filed on 20  
Jan 2000, ABANDONED Continuation-in-part of Ser. No. US  
1998-140149, filed on 26 Aug 1998, GRANTED, Pat. No. US  
6117680 Continuation-in-part of Ser. No. US  
1998-126009, filed on 29 Jul 1998, ABANDONED  
Continuation-in-part of Ser. No. US 1997-920610, filed  
on 27 Aug 1997, GRANTED, Pat. No. US 6015709  
Continuation-in-part of Ser. No. US 1997-918401, filed  
on 26 Aug 1997, ABANDONED Continuation-in-part of Ser.  
No. WO 1997-US15219, filed on 27 Aug 1997, UNKNOWN

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street,  
Cambridge, MA, 02139  
NUMBER OF CLAIMS: 22  
EXEMPLARY CLAIM: 1

L3 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2003:203848 CAPLUS  
TI Usefulness of skin hydration for skin care and development of cosmetics  
AU Kohno, Yoshiyuki  
CS Material Science Research Center, Shiseido Research Center, Japan  
SO Nippon Keshohin Gijutsusha Kaishi (2002), 36(4), 253-261  
CODEN: NKGKF8  
PB Nippon Keshohin Gijutsushakai  
DT Journal  
LA Japanese  
CC 62 (Essential Oils and Cosmetics)  
AB Maintaining suitable skin hydration is very effective for preventing dry skin. This is the most basic and important function of cosmetics. Various types of **emollients** and **humectants** are used in skincare products to prevent **water loss** from the skin and retain **water**. In the stratum corneum, the importance of natural moisturizing factor (NMF), sebum and intercellular lipids has been demonstrated. From a dermatol. approach, we have already reconstructed an analogy of the skin hydration mechanism. For dry skin, we have demonstrated the usefulness of "moisture balance;" i.e., to supply equiv. substances of water, humectants and oils in cosmetics. It is also important to develop cosmetics from a pharmacol. approach. This is very helpful in the development of new, more effective components for cosmetics. Recently we have clarified the important role of epidermal protease activity in dry skin. Inhibition of its activity accelerates intercellular repair response. We have developed trans-4-aminomethyl cyclohexane carboxylic acid (t-AMCHA), which has an anti-plasmin (a epidermal protease) activity and can cure dry skin. This article reviews the skin hydration mechanism and development of skin care cosmetics utilizing dermatol. and pharmacol. approaches.

L3 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:622142 CAPLUS  
DN 138:308917  
TI An effective, cosmetically acceptable, novel hydro-gel emollient for the management of dry skin conditions  
AU Wynne, A.; Whitefield, M.; Dixon, A. J.; Anderson, S.  
CS The Health Centre, Dovercourt, Essex, UK  
SO Journal of Dermatological Treatment (2002), 13(2), 61-66  
CODEN: JDTREY; ISSN: 0954-6634  
PB Martin Dunitz Ltd.  
DT Journal  
LA English  
CC 62-4 (Essential Oils and Cosmetics)  
AB A novel hydro-gel emollient (Doublebase) has been developed with improved moisturizing effects. To test this novel hydro-gel for its moisturizing effect, for its potential to cause skin irritant/allergy and for its clin. effectiveness and acceptability in dry skin conditions. Skin hydration (corneometry) and trans-epidermal water loss (TEWL) studies with a single application in 18 volunteers confirmed its efficacy ( $p < 0.0001$ ) and showed that it was superior to Ultrabase and Diprobase ( $p < 0.001$ ). Skin hydration studies with multiple applications in 12 volunteers also showed that it was superior to Ultrabase and Diprobase ( $p < 0.0001$ ). Irritation tests in 74 eczema-prone patients resulted in only one mild reaction, and allergy tests in 99 healthy volunteers elicited no pos. reactions. The clin. acceptability and effectiveness of Doublebase was demonstrated in an open study of 78 patients with dry skin conditions. Doublebase may be considered a suitable prepn. that can be used effectively by most patients with dry skin conditions.  
ST hydrogel moisturizer cosmetic dry skin  
IT Human  
Skin  
(hydrogel emollient for dry skin conditions)

IT Cosmetics  
 (moisturizers; hydrogel emollient for dry skin conditions)  
 IT 186708-87-2, Diprobase 509116-35-2, Doublebase 509116-53-4, Ultrabase  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (hydro-gel emollient for dry skin conditions)  
 IT 7732-18-5, Water, properties  
 RL: PRP (Properties)  
 (transepidermal water loss; hydro-gel  
 emollient for dry skin conditions)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD

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- (17) Stotts, J; Planning, conduct, and interpretation. Human predictive sensitisation patch tests. Current concepts in cutaneous toxicity 1980, P41
- (18) Thune, P; Acta Derm Venereol 1989, suppl 144, P133
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- (21) Werner, Y; Acta Derm Venereol 1986, V66, P281 MEDLINE

L3 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:485013 CAPLUS

DN 137:24161

TI Skin care composition and its use for healing damaged skin

IN Kim, Hyun Joon

PA Intercosm Biotech Laboratories Inc., S. Korea

SO Ital. Appl., 35 pp.

CODEN: ITXXCZ

DT Patent

LA Italian

IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IT 99MI1884	A1	20010308	IT 1999-MI1884	19990908
PRAI	KR 1998-26753	A	19980803		
AB	A formulation for a skin care compn. and its use for healing damaged skin is described. The compn. protects the skin's lipid constituents and the structural properties of the epidermal membranes. The main components for the skin's horny layer (stratum corneum) membranes include ceramides, cholesterol, fatty acids, the main components for the endodermis include lecithin and triglycerides and an active ingredient, phytosphingosine, and its derivs. This compn. can be described as of superior performance due to its skin penetration and the obsd. improved capacity of the skin to retain water. The same compn. has the effect of reinforcing the lamella				

of the stratum corneum making it function as an epidermal barrier. There is a redn. in transcutaneal **water loss** as a result of this barrier effect, indicating excellent hydrating and **emollient** benefits. The skin care compn. is effective in healing damaged skin and acne.

ST skin care healing compn phytosphingosine

IT Cosmetics

(emollients; skin care compn. and use for healing damaged skin)

IT Acne

Cosmetics

Hydration, physiological

Skin

Skin, disease

(skin care compn. and use for healing damaged skin)

IT Ceramides

Fatty acids, biological studies

Glycerides, biological studies

Phosphatidylcholines, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(skin care compn. and use for healing damaged skin)

IT Drug delivery systems

(topical; skin care compn. and use for healing damaged skin)

IT 57-88-5, Cholesterol, biological studies 60-33-3, Linoleic acid, biological studies 112-80-1, Oleic acid, biological studies 554-62-1, Phytosphingosine

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(skin care compn. and use for healing damaged skin)

IT 13018-48-9P 325141-78-4P, N,N,N-Trimethyl phytosphingosine

RL: COS (Cosmetic use); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(skin care compn. and use for healing damaged skin)

L3 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:206306 CAPLUS

DN 137:283924

TI A comparison of the effects of bath additives on the barrier function of skin in normal volunteer subjects

AU Hill, S.; Edwards, C.

CS Department of Dermatology, University of Wales College of Medicine, Cardiff, UK

SO Journal of Dermatological Treatment (2002), 13(1), 15-18

CODEN: JDTREY; ISSN: 0954-6634

PB Martin Dunitz Ltd.

DT Journal

LA English

CC 62-4 (Essential Oils and Cosmetics)

AB **Emollients** form an occlusive layer on the skin surface, reducing transepidermal **water loss** (TEWL), thus providing a temporary restoration of barrier function in compromised skin. This study evaluated the ability of 3 bath additives to reduce TEWL from compromised skin. The stratum corneum on areas of forearm skin was removed by the repeated application of D-Squame disks. After 1 h, baseline measurements ( $t = 0$ ) of TEWL were recorded before each arm was immersed for 10 min in a warm water-bath contg. 1 of 4 treatments. The arms were air-dried for 20 min and the TEWL measurements repeated. Three further TEWL measurements were made at 30-min intervals. Measurements were made using a Tewameter in a controlled atm. There was little difference between the products in terms of changes in mean TEWL values. However, when expressed relative to  $t = 0$  values, some differences became apparent. The mean values for sites treated with Balmandol were lower than the other sites at 60, 90, and 120 min. When analyzed by the summary statistic AUC (area under the curve), the difference between Balmandol and water and also Balmandol and Eucerin was statistically significant. These results would suggest that Balmandol has a greater effect on barrier function (as assessed by measurement of a

redn. in TEWL values) than Eucerin.  
ST bath prepn skin water loss fatty acid  
IT Bath preparations  
Human  
    (bath additives on barrier function of skin)  
IT Cosmetics  
    (emollients; bath additives on barrier function of skin)  
IT Alcohols, biological studies  
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
    (lanolin; bath additives on barrier function of skin)  
IT Skin  
    (stratum corneum; bath additives on barrier function of skin)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE  
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L3 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:109701 CAPLUS  
DN 136:289027

TI Eumovate (clobetasone butyrate) 0.05% cream with its moisturizing emollient base has better healing properties than hydrocortisone 1% cream: A study in nickel-induced contact dermatitis

AU Parneix-Spake, A.; Gouatas, P.; Green, R.

CS Aster, Paris, Fr.

SO Journal of Dermatological Treatment (2001), 12(4), 191-197  
CODEN: JDTREY; ISSN: 0954-6634

PB Martin Dunitz Ltd.

DT Journal

LA English

CC 1-12 (Pharmacology)

Section cross-reference(s): 63

AB Background: The emollient base of a topical corticosteroid, through its moisturizing properties, can be a useful treatment adjunct. Objective: To compare the healing properties of Eumovate (clobetasone butyrate) 0.05% cream with its emollient base, hydrocortisone 1% cream and with no treatment. Methods: A single-center, doubleblind, intra-individual, comparative study that involved 18 volunteers with nickel-induced contact dermatitis. Following a pos. patch test to nickel, sub-therapeutic amts. (10  $\mu$ g/cm<sup>2</sup>) of each of the treatments were applied twice daily for seven days to each of the four test sites. Results: In terms of the primary endpoint, a physician's global assessment after 7 days of treatment, clobetasone butyrate (CB) 0.05% cream showed a significantly better response than hydrocortisone (HC) 1% cream (78% vs 39%, difference -0.4, 95% CI -0.7 to -0.1; p = 0.046) or no treatment (78% vs 28%, difference -0.5, 95% CI -0.9 to -0.1; p = 0.016). CB 0.05% cream also showed a better response than its emollient base (78% vs 56%), though statistical significance was not achieved. In terms of moisturizing effects, there was no difference in transepidermal water loss (TEWL) between CB 0.05% cream and its emollient base. CB 0.05% cream treated sites did, however, have

significantly lower values (i.e. were more moisturized) than untreated sites (difference -8.5, 95% CI -12.0 to -4.86; p < 0.001) or HC 1% treated sites (difference -7.1, 95% CI -11.0 to -3.4; p < 0.001). In terms of skin blanching activity, as expected the steroid-based creams achieved lower colorimetric values than the emollient base cream. Conclusions: These results from exptl. induced skin inflammation indicate that CB 0.05% (as Eumovate 0.05% cream) has both more effective anti-inflammatory activity and better moisturizing properties than hydrocortisone 1% cream and that these effects are in part due to its efficient emollient base.

ST antiinflammatory eumovate topical cream moisturizer emollient hydrocortisone dermatitis; clobetasone butyrate corticosteroid healing contact dermatitis nickel

IT Dermatitis  
(contact; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Cosmetics  
(creams, moisturizers; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Drug delivery systems  
(emollients; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Anti-inflammatory agents  
Human  
Skin preparations (pharmaceutical)  
Wound healing promoters  
(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Corticosteroids, biological studies  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Drug delivery systems  
(ointments, creams; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Drug delivery systems  
(topical; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT 7440-02-0, Nickel, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT 50-23-7, Hydrocortisone 25122-57-0, Clobetasone butyrate  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

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L3 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2000:772500 CAPLUS  
 DN 133:325706  
 TI Skin-friendly absorbent articles and compositions  
 IN Krzysik, Duane Gerard; Otts, David Roland; Lange, Beth Anne; Nelson, Brenda Marie  
 PA Kimberly-Clark Worldwide, Inc., USA  
 SO PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61L015-34  
 ICS A61L015-20; A61L015-24; A61L015-48  
 CC 63-8 (Pharmaceuticals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000064501	A1	20001102	WO 2000-US10957	20000420
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6475197	B1	20021105	US 1999-382018	19990824
	GB 2363721	A1	20020109	GB 2001-26294	20000420
	DE 10084522	T	20020502	DE 2000-10084522	20000420
	BR 2000009925	A	20021231	BR 2000-9925	20000420
PRAI	US 1999-130901P	P	19990423		
	US 1999-382018	A	19990824		
	WO 2000-US10957	W	20000420		
AB	A superior skin barrier enhancing body facing material on an absorbent article, can be made applying, on the outer surface of the body facing material, a melted lipid-enriched hydrophilic compn. comprising a hydrophilic solvent, a high mol. wt. polyethylene glycol, a fatty alc. (C14-30 or greater), <b>humectant</b> , an oil-in-water emulsifying surfactant having an HLB range greater than 7, a sterol or sterol deriv., and a natural fat or oil, and thereafter resolidifying the compn. to form a distribution of solid compn. on the outer surface of the body facing material. A formulation contained glycerol 5, glyceryl stearate SE 3, borage oil 1, aloe 0.3, tocopherol acetate 0.3 and water qs to 100% with pH adjusted to 5.5 and the formulation used for treatment of absorbent article to promote barrier repair as measured by transepidermal water loss.				
ST	skin absorbent article lipid				
IT	Fats and Glyceridic oils, biological studies RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Limnanthes alba seed, maleated; skin-friendly absorbent articles)				
IT	Medical goods (absorbents; skin-friendly absorbent articles)				
IT	Fats and Glyceridic oils, biological studies RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				

(apricot; skin-friendly absorbent articles)  
IT    Fats and Glyceridic oils, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (avocado; skin-friendly absorbent articles)  
IT    Fats and Glyceridic oils, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (babassu; skin-friendly absorbent articles)  
IT    Fats and Glyceridic oils, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (borage seed; skin-friendly absorbent articles)  
IT    Fats and Glyceridic oils, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (evening primrose; skin-friendly absorbent articles)  
IT    Alcohols, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (fatty; skin-friendly absorbent articles)  
IT    Cottonseed oil  
Palm kernel oil  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (hydrogenated; skin-friendly absorbent articles)  
IT    Soybean oil  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (maleated; skin-friendly absorbent articles)  
IT    Absorbents  
    (medical; skin-friendly absorbent articles)  
IT    Cannabis  
    (seed; skin-friendly absorbent articles)  
IT    Chamomile  
Humectants  
Surfactants  
    (skin-friendly absorbent articles)  
IT    Canola oil  
Castor oil  
Coconut oil  
Corn oil  
Cottonseed oil  
Fats and Glyceridic oils, biological studies  
Fatty acids, biological studies  
Glycols, biological studies  
Palm kernel oil  
Phospholipids, biological studies  
Polyoxyalkylenes, biological studies  
Rape oil  
Sterols  
Sunflower oil  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (skin-friendly absorbent articles)  
IT    Fats and Glyceridic oils, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (teaseed; skin-friendly absorbent articles)  
IT    50-70-4, Sorbitol, biological studies 56-81-5, Glycerol, biological studies  
57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies  
57-55-6, Propylene glycol, biological studies 57-88-5, Cholesterol, biological studies 60-33-3, Linoleic acid, biological studies  
79-63-0, Lanosterol 111-60-4, Glycol stearate

112-53-8, Lauryl alcohol 112-72-1, Myristyl alcohol 112-92-5, Stearyl alcohol 629-96-9, Arachidyl alcohol 661-19-8, Behenyl alcohol 7732-18-5, Water, biological studies 9005-25-8D, Starch, hydrolyzates, biological studies 11099-07-3, Glyceryl stearate 25322-68-3, Peg 36653-82-4, Cetyl alcohol 56451-84-4, Sorbitan stearate  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(skin-friendly absorbent articles)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (2) Hamada, S; WO 9731620 A 1997 CAPLUS
- (3) Procter & Gamble; WO 9913861 A 1999 CAPLUS
- (4) Unilever Plc; WO 9937744 A 1999 CAPLUS
- (5) Upjohn Company; GB 880276 A 1961

L3 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2000:699080 CAPLUS

DN 133:271700

TI formulation for healing and protecting skin containing Curcuma extract, natural gum, fragrant oil, beeswax and petroleum jelly

IN Bindra, Rattan Lal; Gupta, Rashmi; Shukla, Yogendra Nath; Dwivedi, Samresh; Kumar, Sushil

PA Council of Scientific and Industrial Research, India

SO U.S., 4 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-00

ICS A61K006-00; A61K007-021

NCL 424401000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6126950	A	20001003	US 1998-58217	19980410
PRAI	IN 1997-DE1715	A	19970624		

AB A herbal formulation for the treatment of cracked heels and palms was claimed. It contains natural ext. of Curcuma (2-10 parts by wt.); natural gum selected from Acacia (gum arabic), Shorea, or colophonium (rosin) (2-20 parts by wt.); natural fragrant oils selected from basil, chamomile, or Mentha oil; natural beeswax as emulsifier, and petroleum jelly. Since the components in the formulation are from herbal sources it safe to use and eco-friendly and does not produce any harmful effects on the skin. The synergistic combination of exts. of Curcuma and natural gum allow wounds to heal quickly when applied to cracked skin. The formulation also contains a wound-healing fragrant oil. The natural wound healing herbal ext. acts as a **humectant** and the gum gives an synergistic effect in binding to the skin, thereby reducing **water loss** from the skin. The cream spreads evenly and smoothly when applied on the affected parts, and quickens healing, restores natural suppleness and softness and also serves as an antiseptic. A formulation contained beeswax 65, petroleum jelly 17, Curcuma ext. (15-18% by wt. water) 10, Shorea gum 4, basil oil 2, preservative Nipagin-m 2 parts by wt., and emollient oil. This formulation was cost-effective to prep. When field-tested it was found to heal mildly cracked skin within 3 days if applied twice daily.

ST heel Curcuma gum oil beeswax petroleum jelly; palm Curcuma gum oil beeswax petroleum jelly; cracked skin Curcuma gum oil beeswax petroleum jelly; Acacia Curcuma oil beeswax petroleum jelly; Shorea Curcuma oil beeswax petroleum jelly; colophonium Curcuma oil beeswax petroleum jelly

IT Essential oils

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)  
(basil, Ocimum basilicum, Ocimum basilicum; formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Essential oils  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(chamomile; formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Beeswax  
Curcuma  
Foot  
Hand  
Margosa (Melia azadirachta)  
Wound healing promoters  
(formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Lanolin  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Petrolatum  
Rosin  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Shorea  
(gum; formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Essential oils  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(mint, Mentha, Mentha; formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT Waxes  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(spermaceti; formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

IT 97-59-6, Allantoin 9000-01-5, Acacia gum  
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(formulation for healing and protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum jelly)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

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(3) Anon; HU 55627 1991  
(4) Anon; PL 157294 1992 CAPLUS  
(5) Anon; Lawless The Illustrated Encyclopedia of Essential Oils: The Complete Guide to the Use of Oils in Aromatherapy and Herbalism 1995, P209  
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(8) Shah; US 5693327 1997  
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(12) Wells; Cosmetics and the Skin 1967, P301 MEDLINE  
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L3 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:108646 CAPLUS  
DN 128:196613  
TI Galenic and dermopharmaceutical effectiveness study of an emulsified pharmaceutical form with retinoic acid  
AU Fresno, M. J.; Jimenez, M. M.; Selles, E.  
CS Dep. Farmacia Tecnologia Farmaceutica, Univ. Alcala, Madrid, 28871, Spain  
SO Drug Development and Industrial Pharmacy (1998), 24(1), 73-79  
CODEN: DDIPD8; ISSN: 0363-9045  
PB Marcel Dekker, Inc.  
DT Journal  
LA English  
CC 63-6 (Pharmaceuticals)  
AB Retinoic acid constitutes an active that is already being used extensively in the fight against cutaneous aging. After a period in which certain scientific publications questioned its use, today there is no doubt that retinoic acid continues to be an active with wide possibilities of use when it is formulated and administered correctly. In this work we propose a new formulation that, on the basis of a modern self-emulsifying excipient, incorporates retinoic acid in its compn. The work protocol is structured in the following points of study. Rheol. assay: Shear rate, shear stress, viscosity, thixotropy, rheodestruction, and extensibility measurements were carred out. Other pharmacotech. assays: External appearance, interposition type, and pH control were studied.  
Dermopharmaceutical effectiveness study: Biophys. non-invasive techniques were applied, according to a standardized work method. The following considerations can be made from the results: the layout of the rheograms could fit, in principle, inside a non-Newtonian-shear-thinning flow behavior, with similar rheodestruction profiles. The hysteresis values, as well as the extensibility indexes that were obtained, detd. a good degree of applicability. From the whole of results, we could conclude that the formulation proposed is profiled like an emulsified pharmaceutical form with an excellent cosmetol. adaptation, eudermic pH, and soft **emollient** action, which prohibits the **loss** of superficial **water** that maintains the retinoic acid action.  
ST retinoic acid emulsion pharmaceutical  
IT Glycerides, biological studies  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
    (C8-10; galenic and dermopharmaceutical effectiveness study of an emulsified pharmaceutical form with retinoic acid)  
IT Drug delivery systems  
    (emulsions, topical; galenic and dermopharmaceutical effectiveness study of an emulsified pharmaceutical form with retinoic acid)  
IT Acne  
Rheology  
    (galenic and dermopharmaceutical effectiveness study of an emulsified pharmaceutical form with retinoic acid)  
IT 302-79-4, Retinoic acid  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
    (galenic and dermopharmaceutical effectiveness study of an emulsified pharmaceutical form with retinoic acid)  
IT 4080-31-3, Quaternium 15 36653-82-4, Cetyl alcohol  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
    (galenic and dermopharmaceutical effectiveness study of an emulsified pharmaceutical form with retinoic acid)  
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (3) Berardesca, E; Dermatol 1991, V181, P1
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- (7) Del Pozo, A; Cien Ind Farm 1985, V4, P126
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L3 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:548112 CAPLUS

DN 127:210182

TI Development and application of acetylhyaluronate for cosmetics

AU Oka, Takashi; Uemura, Masaaki; Ueno, Norio; Yanaki, Toshio; Yamaguchi, Michihiro

CS Shiseido Res. Cent., Kanagawa, 223, Japan

SO Scientific Conference of the Asian Societies of Cosmetic Scientists, 3rd, Taipei, May 23-24, 1997 (1997), 234-245 Publisher: Asian Societies of Cosmetic Scientists, Taichung, Taiwan.

CODEN: 64XSAZ

DT Conference

LA English

CC 62-4 (Essential Oils and Cosmetics)

AB To maintain healthy and fresh skin, it is necessary to moisten sufficiently stratum corneum. Due to aging, surroundings, phys. constitution, and other factors, the stratum corneum always has a tendency to lose its normal water content. It is effective to apply humectants to the skin for keeping the normal water content. In general, humectants, sodium hyaluronate (HA), which is made from safe biol. sources and is hardly subject to relative humidity of environment, has a very high moisturizing effect. To endow HA with precious functions, the authors synthesized varieties of HA derivs. and evaluated their usefulness for cosmetic products. After numerous investigations for finding HA derivs., the authors eventually discovered a novel HA deriv., sodium acetylhyaluronate (AcHA), which increases moisturizing effect and has a very high skin-softening effect for stratum corneum. To clarify the mechanism of the skin-softening effect, the hygroscopicity of AcHA was measured. The hygroscopicity of AcHA was equal to that of HA. However, DSC also showed that the bound water content of stratum corneum treated with AcHA was markedly greater than that of HA-treated stratum corneum. It was also found by an in vivo test that AcHA raised the water content of stratum corneum more than HA did. Apparently, AcHA could enhance the intrinsic water-holding capacity of the stratum corneum. Thus, there was an interaction between AcHA and stratum corneum and this could induce the strong skin-softening effect. To investigate this interaction, the adsorption of AcHA on human skin was measured. The amt. of adsorption of AcHA was markedly greater than that of HA. This was consistent with the fact that AcHA is an amphiphilic polymer having an effect of lowering the surface tension. Considering these results and properties, it was suggested that AcHA could be adsorbed efficiently on human skin, and this adsorption reduced the transepidermal water loss and resulted in the skin-softening effect. Upon the use of AcHA in cosmetic formulation, it was observed that a lotion contg. 0.2% AcHA could increase the water contents in stratum corneum, reduce the transepidermal water loss, and improve the skin condition. Although further research is necessary to demonstrate the skin-softening effect of AcHA, the

superior effect of AcHA as a **humectant** was confirmed in this study.  
 ST acetylhyaluronate skin humectant cosmetic; hyaluronate acetyl skin humectant cosmetic  
 IT Elasticity  
 Humectants  
 Hydration, chemical  
 (acetylhyaluronate for cosmetics)  
 IT Skin, disease  
 (dry; acetylhyaluronate for cosmetics)  
 IT Cosmetics  
 (moisturizers; acetylhyaluronate for cosmetics)  
 IT Skin  
 (stratum corneum; acetylhyaluronate for cosmetics)  
 IT 9067-32-7DP, Sodium hyaluronate, acetyl derivs.  
 RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (acetylhyaluronate for cosmetics)  
 IT 9067-32-7, Sodium hyaluronate  
 RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 (acetylhyaluronate for cosmetics)

L3 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:385532 CAPLUS

DN 127:6207

TI Nonerasable ink-jet ink compositions containing a colored polyurethane dispersion

IN Banning, Jeffery H.; Bui, Loc B.

PA Tektronix, Inc., USA

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C08G018-08

ICS C08G018-38; C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 769509	A2	19970423	EP 1996-307248	19961003
	EP 769509	A3	19971203		
	EP 769509	B1	20020116		
	R: DE, FR, GB, NL				
	US 5700851	A	19971223	US 1995-543966	19951017
	JP 09124989	A2	19970513	JP 1996-293319	19961015
PRAI	US 1995-543966	A	19951017		
AB	Title stable ink-jet ink compn. comprises a mixt. of (1) an aq. colored polyurethane dispersion made from internal surfactant- and reactive colorant-contg. urethane prepolymer, .gtoreq.1 neutralizing agent, an aq. medium and .gtoreq.1 chain extender; (2) an aq. medium and (3) .gtoreq.1 <b>humectant</b> . Thus, a urethane prepolymer prep'd. from poly(tetramethylene glycol) (Terathane 2000) 66.94, a reactive colorant Milliken Exp Red 25.60, dimethylolpropionic acid 10.24 and IPDI 42.4 g was neutralized with 7.8 g triethylamine and then chain-extended with 3.4 g ethylene diamine to give a colored polyurethane dispersion, 20 g of which was mixed with plasticizer PEG 200 (polyethylene glycol) 4.32 g to give an ink, the printed image from which showed no noticeable smearing by wet finger rubbing and no noticeable color <b>loss</b> by running <b>water</b> washing.				
ST	nonerasable colored ink jet polyurethane compn; colorant internal polyurethane ink; tetramethylene glycol dimethylolpropionic acid IPDI polyurethane				
IT	Inks				

(jet-printing; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT Humectants

Plasticizers  
(nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(plasticizer; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT Polyurethanes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyoxyalkylene-polyurea-, block; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT Polyureas  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyoxyalkylene-polyurethane-, block; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT 56-81-5, 1,2,3-Propanetriol, uses 57-55-6, 1,2-Propanediol, uses 102-71-6, uses 616-45-5, 2-Pyrrolidone  
RL: MOA (Modifier or additive use); USES (Uses)  
(humectant; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT 189750-64-9P 190192-88-2P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

IT 117-81-7, Dioctyl phthalate 629-11-8, 1,6-Hexanediol 25322-68-3  
RL: MOA (Modifier or additive use); USES (Uses)  
(plasticizer; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion)

L3 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1996:351009 CAPLUS  
DN 125:49217  
TI Topical ointment therapy benefits premature infants  
AU Nopper, Amy Jo; Horii, Kimberly A.; Sookdeo-Drost, Sharon; Wang, Tung Ho; Mancini, Anthony J.; Lane, Alfred T.  
CS School Medicine, Stanford University, Stanford, CA, 94305-5334, USA  
SO Journal of Pediatrics (St. Louis) (1996), 128(5, Pt. 1), 660-669  
CODEN: JOPDAB; ISSN: 0022-3476  
PB Mosby-Year Book  
DT Journal  
LA English  
CC 1-12 (Pharmacology)  
AB Premature infants have an ineffective epidermal barrier. The aim of this study was to investigate the cutaneous and systemic effects of preservative-free topical ointment therapy in premature infants. We conducted a prospective, randomized study of 60 infants less than 33 wk estd. gestational age. The treated infants received therapy for 2 wk with twice-daily preservative-free topical ointment therapy while the control group received no topical treatment or as-needed therapy with a water-in-oil **emollient**. Data collection included transepidermal **water loss** (TEWL) measurement, skin condition evaluations, fungal and quant. bacterial skin cultures, anal. of fluid requirements, patterns of wt. loss or gain, and the incidence of blood and cerebrospinal fluid cultures pos. for microorganisms. We found that topical ointment therapy significantly decreased TEWL during the first 6 h after the initial application. TEWL was decreased by 67% (p = 0.0001) when measured 30 min after application and 34% (p = 0.001) when measured 4 to 6 h after application. We also obsd. significantly superior skin

condition scores in the treated group on study days 7 and 14 ( $p = 0.001$  and  $0.0004$ , resp.). Quant. bacterial cultures revealed significantly less colonization of the axilla on day 2, 3, or 4 and on day 14 ( $p = 0.008$  and  $0.04$ , resp.). The incidence of pos. findings in blood and/or cerebrospinal fluid cultures was 3.3% in the treated group of infants vs. 26.7% in the control group ( $p = 0.02$ ). There was no statistical difference in the fluid requirements or patterns of wt. gain or loss during the 2 wk of the study. Preservative-free topical ointment therapy decreased TEWL for 6 h after application, decreased the severity of dermatitis, and decreased bacterial colonization of axillary skin. Infants treated with ointment had fewer blood and cerebrospinal fluid cultures pos. for microorganisms. These data support the use of topical ointment therapy in very premature infants during the first weeks after birth.

ST topical ointment newborn  
IT Newborn  
    (topical ointment therapy benefits premature human infants)  
IT Pharmaceutical dosage forms  
    (topical, topical ointment therapy benefits premature human infants)

L3 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1995:194145 CAPLUS  
DN 122:16985  
TI In vivo evaluation of the effects of moisturizers on transepidermal water loss using factorial designs  
AU McCallion, R.; Li Wan Po, A.  
CS Drug Delivery Research Group, The School of Pharmacy, Medical Biology Centre, The Queen's University of Belfast, 97 Lisburn Road, Belfast, BT9 7BL, UK  
SO International Journal of Pharmaceutics (1995), 113(2), 247-55  
CODEN: IJPHDE; ISSN: 0378-5173  
PB Elsevier  
DT Journal  
LA English  
CC 63-5 (Pharmaceutics)  
AB The effect of topical applications of pyrrolidone carboxylic acid (PCA), sodium lactate (NaL) and urea on in vivo transepidermal water loss (TEWL) in healthy volunteers was studied. The moisturizing compds. were applied both singly and as mixts. using a 22 factorial design. It is shown that all three compds. increased TEWL and that moreover, urea and PCA exerted synergism. No such interaction was obsd. between urea and sodium lactate. The study provides a rational basis for the co-formulation of urea and PCA in moisturizing products for topical use.  
ST moisturizer transepidermal water factorial design; emollient humectant transepidermal water  
IT **Humectants**  
    Hydration, biological  
    Skin  
    Statistics and Statistical analysis  
        (factorial designs in study of moisturizers effect on transepidermal water loss)  
IT Pharmaceutical dosage forms  
    (emollients, factorial designs in study of moisturizers effect on transepidermal water loss)  
IT 57-13-6, Urea, biological studies 72-17-3, Sodium lactate 98-79-3, Pyrrolidone carboxylic acid  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
    (factorial designs in study of moisturizers effect on transepidermal water loss)  
IT 7732-18-5, Water, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(factorial designs in study of moisturizers effect on transepidermal water loss)

IT 57-55-6, Propylene glycol, biological studies  
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(moisturizer vehicle; factorial designs in study of moisturizers effect on transepidermal water loss)

L3 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1990:609038 CAPLUS  
DN 113:209038  
TI Development of a stratum corneum lipid model to study the cutaneous moisture barrier properties  
AU Rhein, Linda D.; Simion, F. Anthony; Froebe, Claudia; Mattai, Jairajh; Cagan, Robert H.  
CS Colgate-Palmolive Co., Piscataway, NJ, 08854, USA  
SO Colloids and Surfaces (1990), 48(1-3), 1-11  
CODEN: COSUD3; ISSN: 0166-6622  
DT Journal  
LA English  
CC 13-7 (Mammalian Biochemistry)  
Section cross-reference(s): 62  
AB A skin lipid model to study barrier properties of stratum corneum has been developed. Research that led to the evolution of this model is presented along with highlights of recent findings. At the normal water content of skin, the model lipid exists as a liq. crystal with only a small amt. of solid crystals present. As the water content is reduced, for example by exposure to a low-humidity environment, more of the solid crystal phase is found. Further x-ray diffraction studies identified the location of specific lipids in the model layered structure. Triglycerides and squalene are found in the hydrophobic Me layer, whereas fatty acids, cholesterol, and ceramides are located between the fatty acid chains. Water uptake was significantly enhanced when extd. stratum corneum lipids or model lipids were combined with the delipidated corneocytes, compared with water uptake of the lipids or delipidated corneocytes alone. Water uptake of the combined system was similar to that of isolated, intact stratum corneum. The effect of glycerol, a well known skin moisturizer, on the model was detd. Although glycerol did not alter the **water loss** of the model at low relative humidity (6% relative humidity (RH)), it maintained the liq. cryst. state of the lipid at the extreme condition; in the absence of glycerol the model showed substantial crystn. and exhibited multiple phases at 6% RH. Glycerol did not exhibit **humectant** behavior under these conditions. This study suggests that an alternate mechanism for moisturization may be to maintain the liq. cryst. structure under dry environmental conditions.  
ST stratum corneum moisture barrier model; skin stratum corneum hydration model; lipid stratum corneum hydration model  
IT Lipids, biological studies  
RL: BIOL (Biological study)  
(as skin moisture barrier model, glycerol effect on)  
IT Hydration, biological  
(by glycerol, of skin stratum corneum lipid model, moisture barrier in relation to)  
IT Cosmetics  
(moisturizers, glycerol effect on hydration of stratum corneum lipid model in relation to)  
IT Skin  
(stratum corneum, lipid model for, glycerol effect on, moisture barrier properties in relation to)  
IT 56-81-5, Glycerol, biological studies  
RL: BIOL (Biological study)  
(skin hydration induction by, lipid model for)

L3 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1986:444704 CAPLUS  
 DN 105:44704  
 TI Bulky cellulosic yarn  
 IN Andreicovici, Gheorghe; Eugenia, Margarit; Amza, Maria; Ceamur, Maria  
 PA Institutul de Cercetari Textile, Rom.  
 SO Rom., 3 pp.  
 CODEN: RUXXA3  
 DT Patent  
 LA Romanian  
 IC D02J001-102  
 CC 40-7 (Textiles)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RO 85273	B1	19850629	RO 1982-108234	19820723
PRAI RO 1982-108234		19820723		

AB Knitted tubes of cellulosic yarn are impregnated with HCHO-glyoxal-urea precondensate (I), crosslinking catalysts, polyolefin softeners, ethoxylated fatty alc. humectants, and optionally, HCHO-melamine precondensate (II), crosslinked at 100-150.degree., and deknitted to give title yarns. This method provides for fast crosslinking of the resins. Thus, immersing knitted 175 g/m<sup>2</sup> tubes (diam. 9-10 cm) of 330 dtex rayon yarn in a bath contg. I 150-250, II 50-80, aq. polypropylene dispersion softener 50-80, NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub> catalyst 6-10, and ethoxylated fatty alc. humectant 2 g/L, squeezing 80% at 8-12 m/min, drying at 100.degree., heating 3 min at 150.degree., and drying the tubes gave bulky yarn with resin content 4.5-4.6%, crosslinking degree 95%, strength loss due to resin treatment 20-24%, and boiling-water-induced shrinkage 40.5%. Knitting this yarn gave rippled, soft, bulky fabric with shrinkages -10 to -6 and 5-9% in the longitudinal and transverse directions, resp., during laundering.

ST rayon bulky yarn; urea glyoxal resin impregnation rayon; melamine resin impregnation rayon; polypropylene softener rayon bulky yarn; softener polyolefin rayon bulky yarn; catalyst crosslinking ammonium phosphate aminoplast; ethoxylated fatty alc humectant rayon; crosslinking aminoplast impregnated rayon yarn

IT Crosslinking catalysts  
 (ammonium dihydrogen phosphate and citric acid-magnesium chloride, for aminoplast-impregnated knitted tubes of rayon yarn, in manuf. of bulky yarn)

IT Rayon, preparation  
 RL: PREP (Preparation)  
 (bulky yarn, manuf. of, crosslinking of aminoplast-impregnated knitted tubes in)

IT Humectants  
 (ethoxylated fatty alcs., for rayon bulky yarn)

IT Crosslinking  
 (of aminoplast-impregnated knitted tubes of rayon yarn, in manuf. of bulky yarn)

IT Softening agents  
 (polyolefins, for rayon bulky yarn)

IT 7786-30-3, uses and miscellaneous  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, contg. citric acid, for crosslinking of aminoplast-impregnated tubes of rayon yarn, in manuf. of bulky yarn)

IT 77-92-9, uses and miscellaneous  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, contg. magnesium chloride, for crosslinking of aminoplast-impregnated knitted tubes of rayon yarn, in manuf. of bulky yarn)

IT 7722-76-1  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for crosslinking of aminoplasts in knitted tubes of rayon yarn, in manuf. of bulky yarn)

IT 9002-92-0 25322-68-3D, fatty ethers  
 RL: USES (Uses)  
 (humectants, for rayon bulky yarn)  
 IT 9003-08-1 27013-01-0  
 RL: USES (Uses)  
 (impregnation of knitted tubes of rayon yarn, in manuf. of bulky yarns)  
 IT 9002-88-4 9003-07-0  
 RL: USES (Uses)  
 (softeners, for rayon bulky yarn)

L3 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1983:95484 CAPLUS  
 DN 98:95484  
 TI Determination of the humectant capacity of some substances used in toothpaste production  
 AU Tolev, R.; Bogoslovova, I.; Boyanova, V.  
 CS Bulg.  
 SO Trudove na Nauchnoizsledovatelskiya Khimikofarmatsevtichen Institut (1982), 12, 163-70  
 CODEN: TKZGAG; ISSN: 0371-8972  
 DT Journal  
 LA Bulgarian.  
 CC 62-7 (Essential Oils and Cosmetics)  
 AB The rate of **water loss** from 10g of solns. of several **humectants** at 51.degree. decreased in the series PEG 400 [25322-68-3] > xylitol [87-99-0] > sorbitol [50-70-4] > PEG 200 > PEG 300 > glycerol [56-81-5] > propylene glycol [57-55-6]. Substances with high water retention are necessary components of high-quality toothpastes.  
 ST humectant capacity toothpaste polyol  
 IT Dentifrices  
 (polyols for, humectant capacity of)  
 IT Humectants  
 (polyols, for toothpastes)  
 IT Alcohols, biological studies  
 RL: BIOL (Biological study)  
 (polyhydric, for toothpaste, humectant capacity of)  
 IT 50-70-4, biological studies 56-81-5, biological studies 57-55-6, biological studies 87-99-0 25322-68-3  
 RL: BIOL (Biological study)  
 (for toothpaste, humectant capacity of)  
 IT 7732-18-5, biological studies  
 RL: PRP (Properties)  
 (loss of, from toothpaste humectants)

L3 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1982:583901 CAPLUS  
 DN 97:183901  
 TI Liquid dye preparations  
 IN Agarwal, Suresh C.; Jaeger, Horst; Podder, Nitya Gopal; Mollet, Hans  
 PA Ciba-Geigy A.-G., Switz.  
 SO Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW

DT Patent  
 LA German  
 IC C09B067-46; C09D011-00; D06P001-642  
 CC 40-6 (Textiles)  
 FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 56991	A2	19820804	EP 1982-100444	19820122
	EP 56991	A3	19821124		
	EP 56991	B1	19850327		
	R: BE, CH, DE, FR, GB, IT, NL				
	US 4411668	A	19831025	US 1982-340685	19820120

JP 57143362	A2 19820904	JP 1982-9641	19820126
PRAI CH 1981-473	19810126		

AB Aq. dye or optical brightener preps. with good redispersibility after partial or complete loss of water by evapn. comprise a dye with low or no solv. in water, a dispersing agent, a **humectant** of general structure RR<sub>1</sub>NCH<sub>2</sub>CH(OH)CH<sub>2</sub>OH (R = C<sub>1</sub>-16 alkyl optionally substituted with OH, CN, halogen, or di-C<sub>1</sub>-4 alkylamino; R<sub>1</sub> = H or CH<sub>2</sub>CH(OH)CH<sub>2</sub>OH), and other optional additives. The compns. are used to prep. aq. or aq.-org. dyebaths, printing inks, or printing pastes. For example, a mixt. of 1-amino-4-hydroxy-2-phenoxyanthraquinone [17418-58-5] 45.4, 20:80 propylene oxide-ethylene oxide block copolymer (I) 2, ligninsulfonate 0.1, H<sub>2</sub>O 18.5, and BuN[CH<sub>2</sub>CH(OH)CH<sub>2</sub>OH]<sub>2</sub> (II) [65838-95-1] 10 g was milled to 1 .mu.m particle size and mixed with I 3, H<sub>2</sub>O 10, and formalin 0.7 g to give a compn. for transfer printing on polyester fabrics. This compn. (1 g) was allowed to stand in a beaker for 72 h at 24-27.degree. and 40-50% relative humidity then mixed with 100 mL H<sub>2</sub>O to give an easily filterable dispersion which left no residue on the filter paper. When II was replaced by 10 g propylene glycol the compn. could not be redispersed or filtered.

ST dye aq dispersion redispersible; disperse dye aq compn redispersible; redispersibility aq dye compn; humectant aq dye compn; aminopropylene glycol humectant; iminodipropanediol humectant; propylene glycol amino humectant; fluorescent brightener compn redispersible

IT Humectants  
(aminopropanediol derivs., aq. dye and fluorescent brightener dispersions contg., with improved redispersibility)

IT Fluorescent brighteners  
(aq. dispersions of, with improved redispersibility, humectants for)

IT Dyeing  
(of polyester fabric, aq. disperse dye compns. for, with improved redispersibility)

IT Textile printing  
(on polyester, aq. disperse dye compns. for, with improved redispersibility)

IT Dyes  
(disperse, aq. preps. contg., with improved redispersibility, humectants for)

IT Alcohols, uses and miscellaneous  
RL: USES (Uses)  
(polyhydric, amino, humectants, aq. dye dispersion contg., with improved redispersibility)

IT Dyes  
(vat, aq. dispersions of, with improved redispersibility, humectants for)

IT 1594-08-7 1833-72-3 2379-79-5 2475-44-7 4395-65-7 10572-60-8  
13001-39-3 17418-58-5 26311-09-1 32568-48-2 70210-08-1  
RL: PROC (Process)  
(aq. dispersions of, with improved redispersibility, humectants for)

IT 65838-95-1 83524-69-0 83524-70-3 83524-71-4 83524-72-5  
RL: USES (Uses)  
(humectants, aq. dye dispersions contg., with improved redispersibility)

L3 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1980:99421 CAPLUS

DN 92:99421

TI Study on the occlusivity of oil films

AU Tsutsumi, Hisao; Utsugi, Toshiaki; Hayashi, Shizuo

CS Tokyo Res. Lab., Kao Soap Co., Ltd., Tokyo, 131, Japan

SO Journal of the Society of Cosmetic Chemists (1979), 30(6), 345-56

CODEN: JSCCA5; ISSN: 0037-9832

DT Journal

LA English

CC 62-1 (Essential Oils and Cosmetics)

AB The occlusivity of oils were detd. in vivo by measuring the suppression of transepidermal **water loss** (TEWL) of the skin. Various **emollients** were applied to human skin in various forms, including powder, soln. an emulsion of different types having different size distributions, and the residual states of the oil films on the skin surface were examd. with time. In order to discuss the occlusivity in relation to the individual skin conditions, the surface temp. of the skin and casual lipid level were also detd. in each subject. The occlusivity of the oil films varied with time, type of oils, their coating amt., phys. forms, emulsion type and droplet diam. of the emulsion; and the occlusive effect of oils also depended upon the characteristics of the skin such as casual lipid level and TEWL. These results could be explained by the differences in uniformity, spreadability and porosity of the oil films on the skin surface in the residual state. It is believed that the emolliency of the oil can be influenced by these differences.

ST occlusivity oil film cosmetic

IT Paraffin oils

Paraffin waxes and Hydrocarbon waxes, biological studies

Petrolatum

RL: BIOL (Biological study)

(cosmetic oil film of, skin occlusivity of)

IT Cosmetics

(oil films of, skin occlusivity of)

IT Skin, metabolism

(transepidermal water loss of, oil films effect on)

L3 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1972:158213 CAPLUS

DN 76:158213

TI Humectants versus moisturizers

AU Jacobi, Otto K.

CS Kolmar Res. Cent., Wiesbaden, Fed. Rep. Ger.

SO Soap, Perfumery & Cosmetics (1972), 45(2), 111-12

CODEN: SPCOAH; ISSN: 0037-749X

DT Journal

LA English

CC 62 (Essential Oils and Cosmetics)

AB **Humectants** are considered to be tech. components of cosmetics which prevent **water loss** from the cosmetics, while moisturizers are specific active additives to impart or restore moisture to the skin.

ST moisturizer cosmetic; humectant cosmetic; cosmetic humectant moisturizer

IT Cosmetics

(humectants and moisturizers in)

IT Humectants

(in cosmetics, moisturizers in relation to)

L3 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1959:31011 CAPLUS

DN 53:31011

OREF 53:5595h-i

TI Humectants in cosmetic emulsions

AU Henney, Gerald C.; Evanson, R. V.; Sperandio, Glen J.

CS St. Louis Coll. of Pharm. and Allied Sci., St. Louis, MO

SO Journal of the Society of Cosmetic Chemists (1958), 9, 329-36

CODEN: JSCCA5; ISSN: 0037-9832

DT Journal

LA Unavailable

CC 17 (Pharmaceuticals, Cosmetics, and Perfumes)

AB A study has been made of the rate of **water loss** from standard vanishing creams in which glycerol, sorbitol, propylene glycol, polyethylene glycol 400 and 1,3-butylene glycol were incorporated at levels of 5 to 25%. This **water loss** is a function of the concn. of **humectant** used and the relative humidity of the

air. No **humectant** studied was most effective at both low and high relative humidities.

IT Humectants

(for cosmetics)

IT Cosmetics

(humectants for)

IT 57-55-6, 1,2-Propanediol  
(as humectant)

IT 50-70-4, Sorbitol 56-81-5, Glycerol 107-88-0, 1,3-Butanediol  
25322-68-3, Polyethylene glycol  
(as humectant in cosmetic emulsions)

L5 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1993:87400 CAPLUS  
 DN 118:87400  
 TI Silicone-containing water-in-oil microemulsions having increased salt content  
 IN Guthauser, Bernadette  
 PA Revlon Consumer Products Corp., USA  
 SO U.S., 5 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC A01N025-04; A61K007-107; A61K007-32; B01J013-00  
 NCL 514785000  
 CC 62-4 (Essential Oils and Cosmetics)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5162378	A	19921110	US 1990-511704	19900420
PRAI US 1990-511704		19900420		
AB	The microemulsions contain a cetyl dimethicone copolyol 8-20, a silicone 10-35, an org. alc. 5-15, a salt 8-20, a <b>humectant</b> 1-20, and water 20-40%. A moisturizing compn. contained urea 13.0, Abil B-9806 10.0, cyclomethicone 25.0, MgSO4 13.0, water 22.9, <b>propylene glycol</b> 3.0, MgCl2 2.0, alc. SD-40 11.0, and citric acid 0.1%.			
ST	emulsion cosmetic cetyl dimethicone copolyol; salt silicone alc emulsion cosmetic			
IT	Salts, biological studies			
	Siloxanes and Silicones, biological studies			
	RL: BIOL (Biological study) (cosmetic moisturizer emulsion contg.)			
IT	Siloxanes and Silicones, biological studies			
	RL: BIOL (Biological study) (di-Me, cosmetic moisturizer emulsion contg.)			
IT	Cosmetics (moisturizers, emulsions, cetyl dimethicone copolyol and salt and alc. and silicone in).			
IT	Salts, uses			
	RL: BIOL (Biological study) (org., cosmetic moisturizer emulsion contg.)			
IT	54-21-7 57-55-6, 1,2-Propanediol, biological studies 62-76-0, Sodium oxalate 67-63-0, 2-Propanol, biological studies 68-04-2, Sodium citrate 72-17-3, Sodium lactate 127-09-3, Sodium acetate 128-44-9 137-40-6, Sodium propionate 139-02-6, Sodium phenate 142-03-0 142-47-2, Sodium glutamate 527-07-1, Sodium gluconate 657-84-1, Sodium toluenesulfonate 814-71-1, Calcium thioglycolate 868-14-4, Potassium bitartrate 870-72-4 877-24-7, Potassium biphthalate 1115-63-5, Potassium aspartate 1327-41-9, Aluminum chlorohydrate 1561-99-5 1984-06-1, Sodium caprylate 2244-21-5 3555-47-3 4075-81-4, Calcium propionate 4316-73-8, Sodium sarcosinate 5793-88-4 6028-57-5, Aluminum caprylate 6485-34-3 7446-70-0, Aluminum chloride (AlCl3), biological studies 7487-88-9, Magnesium sulfate, biological studies 7632-05-5 7647-14-5, <b>Sodium chloride</b> , biological studies 7772-98-7, Sodium thiosulfate 7786-30-3, Magnesium chloride, biological studies 9007-48-1, Polyglyceryl-3 oleate 10043-52-4, Calcium chloride, biological studies 13682-92-3 16106-44-8, Potassium toluenesulfonate 18748-98-6 18917-91-4, Aluminum lactate 18917-93-6, Magnesium lactate 18962-61-3, Magnesium aspartate 19544-65-1 24634-61-5, Potassium sorbate 31142-56-0, Aluminum citrate 34316-64-8, Hexyl laurate 34452-51-2, Potassium thioglycolate 60168-81-2, Sodium dihydroxyglycinate 61116-08-3, SD Alcohol 40 61848-87-1 64539-73-7 67990-17-4 83138-62-9 134910-86-4, Aluminum Zirconium Tetrachlorohydrex Gly			
	RL: BIOL (Biological study) (cosmetic moi			